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SEVENTH ANNUAL REPORT

OF THE

BUREAU OF ETHNOLOGY

TO THE

SECRETARY OF THE SMITHSONIAN INSTITUTION

1885-'86

BY

J. W. POWELL
DIRECTOR

WASHINGTON
GOVERNMENT PRINTING OFFICE
1891

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LETTER OF TRANSMITTAL.

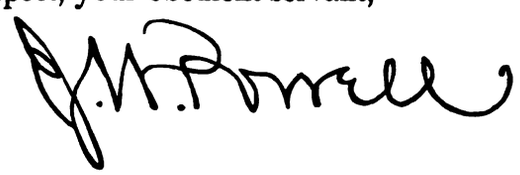
SMITHSONIAN INSTITUTION, BUREAU OF ETHNOLOGY,
Washington, D. C., October 1, 1886.

SIR: I have the honor to submit my Seventh Annual Report as Director of the Bureau of Ethnology.

The first part consists of an explanation of the plan and operations of the Bureau; the second part consists of a series of papers on anthropologic subjects, prepared to illustrate the methods and results of the work of the Bureau.

I desire to express my thanks for your earnest support and your wise counsel relating to the work under my charge.

I am, with respect, your obedient servant,



Prof. SPENCER F. BAIRD,
Secretary of the Smithsonian Institution.

SEVENTH ANNUAL REPORT

OF THE

BUREAU OF ETHNOLOGY.

By J. W. Powell, Director.

INTRODUCTION.

The prosecution of ethnologic researches among the North American Indians, in accordance with act of Congress, was continued during the fiscal year 1885–'86.

The general plan upon which the work has been prosecuted in former years, and which has been explained in earlier reports, was continued in operation.

General lines of investigation were indicated by the Director, and the details intrusted to selected persons trained in their several pursuits, the results of whose labors are published from time to time in the manner provided for by law. A brief statement of the work upon which each of these special students was engaged during the year, with its condensed result, is presented below. This, however, does not specify in detail all of the studies undertaken or services rendered by them, as particular lines of research have been temporarily suspended in order to accomplish immediately objects regarded as of superior importance. From this cause the publication of several treatises and monographs has been delayed, although in some instances they have been heretofore reported as substantially completed, and, indeed, as partly in type.

The present opportunity is used to invite and urge again the assistance of explorers, writers, and students, who are not and

gaged during the remainder of the year in exploring the mounds of northern Georgia and east Tennessee.

Rev. S. D. Peet was employed for a few months in preparing a preliminary map showing the localities of the antiquarian remains of Wisconsin and the areas formerly occupied by the several Indian tribes which are known to have inhabited that region. In addition he prepared for use in the report notes on the distribution and character of the mounds and other ancient works of Wisconsin.

Mr. Smith was engaged during the month of June, 1886, in exploring mounds and investigating the ancient works in southwestern Pennsylvania; and Mr. Reynolds, during the same time, in tracing and exploring the monumental remains of western New York.

Notwithstanding the details necessary for office work in the preparation of maps and plats for the report, and cataloguing the collection, the amount of field work accomplished was equal to that done in previous years. Although, as before stated, one of the assistants, Mr. Middleton, was chiefly engaged, while in the field, in surveying, about 3,500 specimens were collected and a large number of drawings obtained illustrating the different modes of construction of the mounds.

EXPLORATIONS IN STONE VILLAGES.

WORK OF DIRECTOR J. W. POWELL.

During the summer of 1885 the Director, accompanied by Mr. James Stevenson, revisited portions of Arizona and New Mexico in which many structures are found which have greatly interested travelers and anthropologists, and about which various theories have grown. The results of the investigation have been so much more distinct and comprehensive than any before obtained that they require to be reported with some detail.

On the plain to the west of the Little Colorado River and north of the San Francisco Mountain there are many scattered ruins, usually having one, two, or three rooms each, all of which are built of basaltic cinders and blocks. Through the plain a valley runs to the north, and then east to the Little Colorado.

Down the midst of the valley there is a wash, through which, in seasons of great rainfall, a stream courses. Along this stream there are extensive ruins built of sandstone and limestone. At one place a village site was discovered, in which several hundred people once found shelter. To the north of this and about twenty-five miles from the summit of San Francisco Peak there is a volcanic cone of cinder and basalt. This small cone had been used as the site of a village, a pueblo having been built around the crater. The materials of construction were derived from a great sandstone quarry near by, and the pit from which they were taken was many feet in depth and extended over two or three acres of ground. The cone rises on the west in a precipitous cliff from the valley of an intermittent creek. The pueblo was built on that side at the summit of the cliff, and extending on the north and south sides along the summit of steep slopes, was inclosed on the east, so that the plaza was entered by a covered way. The court, or plaza, was about one-third of an acre in area. The little pueblo contained perhaps sixty or seventy rooms. Southward of San Francisco Mountain many other ruins were found.

East of the San Francisco Peak, at a distance of about twelve miles, another cinder cone was found. Here the cinders are soft and friable, and the cone is a prettily shaped dome. On the southern slope there are excavations into the indurated and coherent cinder mass, constituting chambers, often ten or twelve feet in diameter and six to ten feet in height. The chambers are of irregular shape, and occasionally a larger central chamber forms a kind of vestibule to several smaller ones gathered about it. The smaller chambers are sometimes at the same altitude as the central or principal one, and sometimes at a lower altitude. About one hundred and fifty of these chambers have been excavated. Most of them are now partly filled by the caving in of the walls and ceilings, but some of them are yet in a good state of preservation. In these chambers, and about them on the summit and sides of the cinder cone, many stone implements were found, especially metates. Some bone implements also were discovered. At the very summit of the little cone there is a plaza, inclosed by a rude wall made

of volcanic cinders, the floor of which was carefully leveled. The plaza is about forty-five by seventy-five feet in area. Here the people lived in underground houses—chambers hewn from the friable volcanic cinders. Before them, to the south, west, and north, stretched beautiful valleys, beyond which volcanic cones are seen rising amid pine forests. The people probably cultivated patches of ground in the low valleys.

About eighteen miles still farther to the east of San Francisco Mountain another ruined village was discovered, built about the crater of a volcanic cone. This volcanic peak is of much greater magnitude. The crater opens to the eastward. On the south many stone dwellings have been built of the basaltic and cinder-like rocks. Between the ridge on the south and another on the northwest there is a low saddle in which other buildings have been erected, and in which a great plaza was found, much like the one previously described. But the most interesting part of this village was on the cliff which rose on the northwest side of the crater. In this cliff are many natural caves, and the caves themselves were utilized as dwellings by inclosing them in front with walls made of volcanic rocks and cinders. These cliff dwellings are placed tier above tier, in a very irregular way. In many cases natural caves were thus utilized; in other cases cavate chambers were made; that is, chambers have been excavated in the friable cinders. On the very summit of the ridge stone buildings were erected, so that this village was in part a cliff village, in part cavate, and in part the ordinary stone pueblo. The valley below, especially to the southward, was probably occupied by their gardens. In the chambers among the overhanging cliffs a great many interesting relics were found, of stone, bone, and wood, and many potsherds.

About eight miles southeast of Flagstaff, a little town on the southern slope of San Francisco Mountain, Oak Creek enters a canyon, which runs to the eastward and then southward for a distance of about ten miles. The gorge is a precipitous box canyon for the greater part of this distance. It is cut through carboniferous rocks—sandstones and limestones—which are here nearly horizontal. The softer sandstones rapidly disinte-

grate, and the harder sandstones and limestones remain. Thus broad shelves are formed on the sides of the cliffs, and these shelves, or the deep recesses between them, were utilized, so that here is a village of cliff dwellings. There are several hundred rooms altogether. The rooms are of sandstone, pretty carefully worked and laid in mortar, and the interior of the rooms was plastered. The opening for the chimney was usually by the side of the entrance, and the ceilings of the rooms are still blackened with soot and smoke. Around this village, on the terrace of the canyon, great numbers of potsherds, stone implements, and implements of bone, horn, and wood were found; and here, as in all of the other ruins mentioned, corncobs in great abundance were discovered.

In addition to the four principal ruins thus described many others are found, most of them being of the ordinary pueblo type. From the evidence presented it would seem that they had all been occupied at a comparatively late date. They were certainly not abandoned more than three or four centuries ago.

Later in the season the Director visited the Supai Indians of Cataract Canyon, and was informed by them that their present home had been taken up not many generations ago, and that their ancestors occupied the ruins which have been described; and they gave such a circumstantial account of the occupation and of their expulsion by the Spaniards, that no doubt can be entertained of the truth of their traditions in this respect. The Indians of Cataract Canyon doubtless lived on the north, east, and south of San Francisco Mountain at the time this country was discovered by the Spaniards, and they subsequently left their cliff and cavate dwellings and moved into Cataract Canyon, where they now live. It is thus seen that these cliff and cavate dwellings are not of an ancient prehistoric time, but that they were occupied by a people still existing, who also built pueblos of the common type.

Later in the season the party visited the cavate ruins near Santa Clara, previously explored by Mr. Stevenson. Here, on the western side of the Rio Grande del Norte, was found a system of volcanic peaks, constituting what is known as the

Valley Range. To the east of these peaks, stretching far beyond the present channel of the Rio Grande, there was once a great Tertiary lake, which was gradually filled with the sands washed into it on every hand and by the ashes blown out of the adjacent volcanoes. This great lake formation is in some places a thousand feet in thickness. When the lake was filled the Rio Grande cut its channel through the midst to a depth of many hundreds of feet. The volcanic mountains to the westward send to the Rio Grande a number of minor streams, which in a general way are parallel with one another. The Rio Grande itself, and all of these lateral streams, have cut deep gorges and canyons, so that there are long, irregular table-lands, or mesas, extending from the Rio Grande back to the Valley Mountains, each mesa being severed from the adjacent one by a canyon or canyon valley; and each of these long mesas rises with a precipitous cliff from the valley below. The cliffs themselves are built of volcanic sands and ashes, and many of the strata are exceedingly light and friable. The specific gravity of some of these rocks is so low that they will float on water. Into the faces of these cliffs, in the friable and easily worked rock, many chambers have been excavated; for mile after mile the cliffs are studded with them, so that altogether there are many thousands. Sometimes a chamber or series of chambers is entered from a terrace, but usually they were excavated many feet above any landing or terrace below, so that they could be reached only by ladders. In other places artificial terraces were built by constructing retaining walls and filling the interior next to the cliff with loose rock and sand. Very often steps were cut into the face of a cliff and a rude stairway formed by which chambers could be reached. The chambers were very irregularly arranged and very irregular in size and structure. In many cases there is a central chamber, which seems to have been a general living room for the people, back of which two, three, or more chambers somewhat smaller are found. The chambers occupied by one family are sometimes connected with those occupied by another family, so that two or three or four sets of chambers have interior communication. Usually, however, the communication from one system of

chambers to another was by the outside. Many of the chambers had evidently been occupied as dwellings. They still contained fireplaces and evidences of fire; there were little caverns or shelves in which various vessels were placed, and many evidences of the handicraft of the people were left in stone, bone, horn, and wood, and in the chambers and about the sides of the cliffs potsherds are abundant. On more careful survey it was found that many chambers had been used as stables for asses, goats, and sheep. Sometimes they had been filled a few inches, or even two or three feet, with the excrement of these animals. Ears of corn and corncobs were also found in many places. Some of the chambers were evidently constructed to be used as storehouses or caches for grain. Altogether it is very evident that the cliff houses have been used in comparatively modern times; at any rate since the people owned asses, goats, and sheep. The rock is of such a friable nature that it will not stand atmospheric degradation very long, and there is abundant evidence of this character testifying to the recent occupancy of these cavate dwellings.

Above the cliffs, on the mesas, which have already been described, evidences of more ancient ruins were found. These were pueblos built of cut stone rudely dressed. Every mesa had at least one ancient pueblo upon it, evidently far more ancient than the cavate dwellings found in the face of the cliffs. It is, then, very plain that the cavate dwellings are not of great age; that they have been occupied since the advent of the white man, and that on the summit of the cliffs there are ruins of more ancient pueblos.

Now, the pottery of Santa Clara had been previously studied by Mr. Stevenson, who made a large collection there two or three years ago, and it was at once noticed that the potsherds of these cliff dwellings are, both in shape and material, like those now made by the Santa Clara Indians. The peculiar pottery of Santa Clara is readily distinguished, as may be seen by examining the collection now in the National Museum. While encamped in the valley below, the party met a Santa Clara Indian and engaged him in conversation. From him the history of the cliff dwellings was soon obtained. His statement was that originally his people lived in six pueblos, built of cut stone,

upon the summit of the mesas; that there came a time when they were at war with the Apaches and Navajos, when they abandoned their stone pueblos above and for greater protection excavated the chambers in the cliffs below; that when this war ended part of them returned to the pueblos above, which were rebuilt; that there afterward came another war, with the Comanche Indians, and they once more resorted to cliff dwellings. At the close of this war they built a pueblo in the valley of the Rio Grande, but at the time of the invasion of the Spaniards their people refused to be baptized, and a Spanish army was sent against them, when they abandoned the valley below and once more inhabited the cliff dwellings above. Here they lived many years, until at last a wise and good priest brought them peace, and persuaded them to build the pueblo which they now occupy—the village of Santa Clara. The ruin of the pueblo which they occupied previous to the invasion of the Spaniards is still to be seen about a mile distant from the present pueblo.

The history thus briefly given was repeated by the governor and by other persons, all substantially to the same effect. It is therefore evident that the cavate dwellings of the Santa Clara region belong to a people still extant; that they are not of great antiquity, and do not give evidence of a prehistoric and now extinct race.

Plans and measurements were made of some of the villages with sufficient accuracy to prepare models. Photographic views and sketches were also procured with which to illustrate a detailed report of the subject to be published by the Bureau.

WORK OF MR. JAMES STEVENSON.

After the investigations made in company with the Director, as mentioned above, Mr. Stevenson proceeded with a party to the ancient province of Tusayan, in Arizona, to study the characteristics of the Moki tribes, its inhabitants, and to make collections of such implements and utensils as illustrate their arts and industries. Several months were spent among the villages, resulting in a large collection of rare objects, all of which were selected with special reference to their anthro-

pologic importance. This collection contains many articles novel in character and with uses differing from any heretofore obtained, and forms an important addition to the collections in the National Museum.

A study of their religious ceremonials and mythology was made, of which full notes were taken. Sketches were made of their masks and other objects which could not be obtained for the collection.

Mrs. Stevenson was also enabled to obtain a minute description of the celebrated dance, or medicine ceremony, of the Navajos, called the Yéibit-cai. She made complete sketches of the sand altars, masks, and other objects employed in this ceremonial.

WORK OF MESSRS. VICTOR MINDELEFF AND COSMOS MINDELEFF.

Mr. Victor Mindeleff, who had been engaged for several years in investigating the architecture of the pueblos and the ruins of the southwest, was at the beginning of the fiscal year at work among the Moki towns in Arizona, in charge of a party. Mr. Cosmos Mindeleff left Washington on July 6 for the same locality. He was placed in charge of the surveying necessary in the Stone Village region, and the result of his work is included in the general report of that division.

Visits were paid to the Moki villages in succession, obtaining drawings of some constructional details, and also traditions bearing on the ruins in that vicinity. The main camp was established near Mashongnavi, one of the Moki villages. A large ruined pueblo, formerly occupied by the Mashongnavi, was here surveyed. No standing walls are found at the present time, and many portions of the plan are entirely obliterated. Typical fragments of pottery were collected.

Following this work, four other ruined pueblos were surveyed, and such portions of them as clearly indicated dividing walls were drawn on the ground plans.

Many of the ruins in this vicinity, according to the traditions of the Mokis, have been occupied in comparatively recent times—a number of them having been abandoned since the Spanish conquest of the country. In several cases the villages

now occupied are not upon the same sites as those first visited by the Spaniards, although retaining the same names.

While the work of surveying was in progress, in charge of Mr. Cosmos Mindeleff, Mr. Victor Mindeleff made a visit of several days at Keam Canyon, there to meet a number of the Navajo Indians to explain the purpose of the work and allay the suspicions of these Indians, a necessary precaution, as some of the proposed work was laid out in Canyon de Chelly, in the heart of their reservation. Recent restrictions to which they had been subjected, as a consequence of new surveys of the reservation line, had made them especially distrustful of parties equipped with instruments for surveying. Incidental to explanations of the purpose of the work, an opportunity was afforded of obtaining a number of mythologic notes, and also interesting data regarding the construction of their "hogans," with the rules prescribing the arrangement of each part of the frame and other particulars. A number of ceremonial songs are sung at the building of these houses, but of these only one could be secured, which was obtained in the original and translated. Whenever opportunity occurred, during the progress of the work, photographs and diagrams of construction of "hogans" were procured.

On August 17 the ceremony of the snake-dance took place at Mashongnavi, similar in every detail to that performed at Walpi, and differing only in the number of participants. Several instantaneous negatives of the various phases of the dance were secured. On the following day the same ceremony was performed on a larger scale at Walpi, the easternmost of the Moki villages.

Mr. Cosmos Mindeleff assisted in collecting from the present inhabitants of the region legendary information bearing upon ruins and in observing the snake-dances, a description of which was prepared for publication.

While the surveys of the ruins were in progress many detailed studies were made of special features in the modern villages, particularly among the "kivas" or religious chambers. In several instances the large roofing timbers of the "kiva" were found to be the old beams from the Spanish churches,

hewn square, and decorated with the characteristic rude carving of the old Spanish work. A number of legends connected with the ruined pueblos were recorded.

On closing this work in the vicinity of the Moki villages, late in August, the party moved into Keam Canyon, en route for Canyon de Chelly. A day was devoted to the survey of a small pueblo of irregular elliptical outline, situated about eighteen miles northeast from Keam Canyon. This ruin is in excellent state of preservation and exhibits in the masonry some stones of remarkably large size. The early part of September was employed in making a close survey of the Mummy Cave group of ruins in Canyon de la Muerte, this work including a five-foot contour map of the ground and the rocky ledge over which the houses were distributed. Detailed drawings of a number of special features were made here, particularly in connection with the circular ceremonial chambers. The latter were so buried under the accumulated débris of fallen walls that much excavation was required to lay bare the details of internal arrangement. A high class of workmanship is here exhibited, both in the execution of the constructional features and in the interior decoration of these chambers. Later the White House group, in the Canyon de Chelly, comprising a village and cliff houses, was examined and platted in the same manner.

The drawings and plans were supplemented with a series of photographs. Some negatives of Navajo houses were also made.

On closing this work the party went into Fort Defiance, en route for Zuñi, and thence to Ojo Caliente, a modern farming pueblo of the Zuñi, about twelve miles south of the principal village. Here two ruins of villages, thought to belong to the ancient Cibola group, were platted. One of these villages had been provided with a circular reservoir of large size, partially walled in with masonry. Here, also, the well preserved walls of a stone church can be seen. The other contains the remains of a large church, built of adobe. A series of widely scattered house-clusters, occurring two miles west of Ojo Caliente, was also examined, but the earth had drifted over the fallen walls

and so covered them that the arrangement of rooms could scarcely be traced at all.

The modern village of Ojo Caliente was also surveyed and diagrams and photographs made.

Towards the end of September camp was moved to the vicinity of Zuñi. Here four other villages of the Cibola group and the old villages on the mesa of Ta-ai-ya-lo-ne were examined. Camp was then moved to Nutria, a farming pueblo of Zuñi. From this camp Nutria was surveyed and photographed, and also the village of Pescado, which is occupied only during the farming season. Both of these modern farming pueblos appear to be built on the ruins of more ancient villages, the remains of which were especially noticeable in the case of Pescado, where the very carefully executed masonry, characteristic of the ancient methods of construction, could be seen outcropping at many points.

WORK OF MR E. W. NELSON.

Following the return of the main party to Washington, some preliminary exploration was carried on by Mr. E. W. Nelson, who made an examination of the headwaters of the South Fork of Salt River, but did not find any ruins. Thence the Blue Ridge was crossed, and the valley of the Blue Fork of the San Francisco River visited. Here ruins were frequently increasing in number toward the south. Farther south three sets of cliff ruins were also located.

GENERAL FIELD STUDIES.

WORK OF DR. H. C. YARROW.

During the summer and fall of 1885, Dr. H. C. Yarrow, acting assistant surgeon U. S. Army, examined points in Arizona and Utah. In the vicinity of Springerville, Apache County, Arizona, in company with Mr. E. W. Nelson, he visited a number of ancient pueblos and discovered that the people formerly occupying the towns had followed the custom of burying their dead immediately outside the walls of their habitations, marking the places of sepulcher with circles of stones.

The graves were four or five feet in depth, and various household utensils had been deposited with the dead. Mr. Nelson, who had made a careful search for these cemeteries, informed him of the locality of hundreds. Unfortunately for anthropometric science, most of the bones are too much decayed to be of practical value. The places of burial selected at these pueblos are similar to the burial places discovered in 1874 near the large ruined pueblo of Abiquiu, in the valley of the Chama, New Mexico.

Dr. Yarrow also visited the Moki pueblos in Arizona, and obtained from one of the principal men a clear and succinct account of their burial customs. While there he witnessed the famous snake dance, which occurs every two years, and is supposed to have the effect of producing rain. From his knowledge of the reptilian fauna of the country he was able to identify the species of serpents used in the dance, and from personal examination satisfied himself that the fangs had not been extracted from the poisonous varieties. He thinks, however, that the reptiles are somewhat tamed by handling during the four days that they are kept in the estufas and possibly are made to eject the greater part of the venom contained in the sacs at the roots of the teeth, by being teased and forced to strike at different objects held near them. He does not think that a vegetable decoction in which they are washed has a stupefying effect, as has been supposed by some. He also obtained from a Moki high priest a full account of the ceremonies attending the dance. Through the assistance of Mr. Thomas V. Keam, of Keam Canyon, Arizona, and Mr. A. M. Stephen, he was able to procure from a noted Navajo wise man an exact account of the burial customs of his people, as well as valuable information regarding their medical practices, especially such as relate to obstetrics.

From Arizona Dr. Yarrow proceeded to Utah, and made an examination of an old rock cemetery near Farmington, finding it similar to the one he discovered in 1872 near the town of Fillmore. The bodies had been carried far up the side of the mountain; cavities had been prepared in a rock slide, and the bodies placed therein. Branches of cottonwood were then laid

over and large boulders piled on top. In several of these graves the skeletons were in a fair state of preservation, and were removed, as well as the articles found with them.

Through the kindness of Mr. William Young, of Grantsville, a skeleton of a Gosiute, in excellent preservation, was obtained, and has been presented to the Army Medical Museum. It may be stated that the examination of the rock cemetery at Farmington showed that the inhabitants of the eastern slope of the Wahsatch Range, in Great Salt Lake Valley, followed the mode of rock sepulture from this, the most northern point visited, to below Parowan, a distance of at least two hundred miles southward, and it seems that these people occupied the valley long subsequent to those living near the water courses who constructed the small mounds on top of which were the rude adobe dwellings, and in some instances used these huts for burial purposes.

WORK OF MR. J. C. PILLING.

In the spring of 1886 Mr. James C. Pilling made a trip to Europe in the interest of his work on the Bibliography of the Languages of the North American Indians, and spent many days in the library of the British Museum, the Bibliothèque Nationale at Paris, and several extensive private libraries in England and France. The results of this trip are highly satisfactory and valuable.

WORK OF MR. JEREMIAH CURTIN.

Mr. Jeremiah Curtin continued to collect vocabularies and myths in California. The whole number of myths obtained in California and Oregon was over three hundred. The number of vocabularies was eight, being the Yana, Atsugëi (Hat Creek), Wasco, Miléblama (Warm Springs), Pai Ute, Shasta, Maidu, and Wintu. Texts were also obtained in Yana, Wasco, Warm Spring, and Shasta.

OFFICE WORK.

Prof. CYRUS THOMAS was engaged during the year, except the few weeks he was in the field, in the preparation of his general report and in correspondence relating to the archeology

of the district before specified. He also finished a paper published in the Sixth Annual Report of this Bureau under the title, "Aids to the study of the Maya Codices," and a special report on the "Burial mounds of the northern sections of the United States." The latter has appeared in the Fifth Annual Report of the Bureau.

Mrs. V. L. THOMAS, in addition to her duties as clerk, has been employed in preparing a catalogue of the ancient works in that part of the United States east of the Rocky Mountains. This catalogue, now nearly complete, is intended to give the localities and character of all the antiquities in the region mentioned, including discoveries which have been noted in publications, as well as those mentioned in the reports of work done under the Bureau.

Mr. JAMES C. PILLING continued to give a large share of his time and attention throughout the year to the "Bibliography of the languages of the North American Indians," which has been adverted to in previous reports. The advance "proof-sheets" of this work, printed in the last fiscal year, were distributed to collaborators and have been the means of obtaining the active cooperation of many persons throughout this and other countries who are interested in linguistic and bibliographic science. They have thus elicited a large number of additions, corrections, suggestions, and criticisms, all of which have received careful consideration.

Mr. FRANK H. CUSHING was engaged in the preparation, from the large amount of Zuñi material collected by him during several years, of papers upon the language, mythology, and institutions of that people.

Mrs. ERMINNIE A. SMITH continued her study of the Iroquoian languages. The first part of her final contribution on the subject was intended to be a Tuscarora grammar and dictionary. The first portion of the dictionary was completed, and had been forwarded to the Bureau when her sudden and lamented death occurred on June 9, 1886, at her home in Jersey City. Her former assistant, Mr. J. N. B. Hewitt, of Tuscarora descent, has been engaged to complete the work she so successfully began, and it is expected that the results of her long labors in the field will be published without delay.

Mr. CHARLES C. ROYCE resigned his connection with the Bureau in the early part of the year, thereby delaying the completion of the work upon the primal title of the Indian tribes to lands within the United States and the methods of procuring their relinquishment, the scope and value of which have before been explained. Mr. Royce, before his departure from Washington, completed a paper on the "Cherokee Nation of Indians," which has appeared in the Fifth Annual Report of the Bureau.

Dr. H. C. YARROW was still engaged in preparing the material for the final volume upon the mortuary customs of the North American Indians, in the prosecution of which the large amount of information received and obtained from various sources has been carefully classified and arranged under proper divisions, so that the manuscript is now being rapidly put into shape for publication.

Dr. WASHINGTON MATTHEWS, U. S. Army, continued to prepare for publication the copious notes obtained by him during former years in the Navajo country, his chief work being upon a grammar and dictionary of the Navajo language. He also wrote several papers, one of which, a "Chant upon the Mountains," has been published in the Fifth Annual Report.

Mr. W. H. HOLMES continued his work in the office during the year, superintending the illustration of the various publications of the Bureau. His scientific studies have been confined principally to the field of American archeologic art. Two fully illustrated papers have been finished and have appeared in the Sixth Annual Report of the Bureau. They are upon "Ancient art of the province of Chiriqui, Colombia," and "A study of the textile art in its relations to the development of form and ornament." Mr. Holmes has, in addition, continued his duties as curator of aboriginal pottery in the National Museum.

Mr. VICTOR MINDELEFF, when not in the field, prepared reports on the Tusayan and Cibola architectural groups. These, when completed, are to be fully illustrated by a series of plans and drawings now being prepared from the field-notes and other material. In this work it is proposed to discuss the archi-

tecture in detail, particularly in the case of the modern pueblos, where many of the constructional devices of the old builders still survive. The examination of these details will be found to throw light on obscure features of many ruined pueblos whose state of preservation is such as to exhibit but little detail in themselves.

In connection with the classification and arrangement of new material from Canyon de Chelly, a paper was prepared on the cliff ruins of that region.

Mr. COSMOS MINDELEFF has been in charge of the modeling room during the last year. Upon his return from the field a series of models to illustrate the Chaco ruins, architecturally the most important in the Southwest, was commenced. Two of these, viz, the ruin of Wejegi and that of a small pueblo near Pueblo Alto, have been finished and duplicates have been deposited in the National Museum. The third, a large model of Peñasco Blanco, is still uncompleted. All of these models are made from entirely new surveys made in the summer of 1884. The scale used in the previous series—the inhabited pueblos and the cliff ruins—though larger than usually adopted for this class of work, has shown so much more detail and has proved generally so satisfactory, that it has been continued in the Chaco Ruin group, bringing the entire series of models made by the Bureau to a uniform scale of 1 : 60, or one inch to five feet. In addition to this the work of duplicating the existing models of the Bureau for purposes of exchange was commenced. Three of these have been completed, and two others are about half finished.

Mr. E. W. NELSON was engaged upon a report of his investigations among the Eskimo tribes of Alaska. A part of this report, consisting of an English-Eskimo dictionary, he has already forwarded.

As hereinafter explained, the year was principally devoted to the synonymy of the Indian tribes, the special studies of several officers of the Bureau being suspended so that their whole time might be employed in that direction. In the year

1885, however, and at subsequent intervals, their work was as follows:

Col. GARRICK MALLERY, U. S. Army, continued the study, by researches and correspondence, of sign language and pictography. A comprehensive, though preliminary, paper on the latter subject has been printed, with copious illustrations, in the Fourth Annual Report.

Mr. H. W. HENSHAW was engaged during the year in work upon the synonymy of Indian tribes, as specified below.

Mr. ALBERT S. GATSCHET continued to revise and perfect his grammar and dictionary of the Klamath language, a large part of which work is in print. He also took down vocabularies from Indian delegates present in this city on tribal business, and thus succeeded in incorporating into the collections of the Bureau of Ethnology linguistic material from the Alibamu, Hitchiti, Muskoki, and Seneca languages.

Rev. J. OWEN DORSEY pursued his work on the Ɋegiha language. Having the aid of a Winnebago Indian for some time he enlarged his vocabulary of that language and recorded grammatical notes. He also reported upon works submitted to his examination upon the Tuscarora, Micmac, and Cherokee languages.

Mr. JAMES MOONEY, who had been officially connected with the Bureau since the early part of the fiscal year, was also engaged upon linguistic work.

SYNONYMY OF INDIAN TRIBES.

The Director has before reported in general terms that the most serious source of perplexity to the student of the history of the North American Indians is the confusion existing among their tribal names. The causes of this confusion are various. The Indian names for themselves have been understood and recorded in diverse ways by the earlier authors, and have been variously transmitted by the latter. Nicknames arising from trivial causes, and often without apparent cause, have been imposed upon many tribes. Names borne by one tribe at some period of its history have been transferred to another, or to several other distinct tribes. Typographical errors, and im-

proved spelling on assumed phonetic grounds, have swelled the number of synonyms until the investigator of a special tribe often finds himself in a maze of nomenclatural perplexity.

It has long been the intention of the Director to prepare a work on tribal names, which so far as possible should refer their confusing titles to a correct and systematic standard. Delay has been occasioned chiefly by the fundamental necessity of defining linguistic stocks or families into which all tribes must be primarily divided; and to accomplish this, long journeys and laborious field and office investigations have been required during the whole time since the establishment of the Bureau. Though a few points still remained in an unsatisfactory condition, it was considered that a sufficient degree of accuracy had been attained to allow of the publication for the benefit of students of a volume devoted to the subject. The preparation of the plan of such a volume was intrusted to Mr. H. W. Henshaw, late in the spring of 1885, and in June of that year the work was energetically begun in accordance with the plans submitted. The preparation of this work, which to a great extent underlies and is the foundation for every field of ethnologic investigation among Indians, was considered of such prime importance that nearly all the available force of the Bureau was placed upon it, to the suspension of the particular investigations in which the several officers had been engaged.

In addition to the general charge of the whole work, Mr. Henshaw gave special attention to the families of the northwest coast from Oregon northward, including the Eskimo, and also several in California. To Mr. Albert S. Gatschet the tribes of the southeastern United States, together with the Pueblo and Yuman tribes, were assigned. The Algonkian family in all its branches—by far the most important part of the whole, so far as the great bulk of literature relating to it is concerned—was intrusted to Col. Garrick Mallery and Mr. James Mooney. They also took charge of the Iroquoian family. Rev. J. O. Dorsey's intimate acquaintance with the tribes of the Siouan and Caddoan families peculiarly fitted him to cope with that part of the work, and he also undertook the Athapascan tribes.

Dr. W. J. Hoffman worked upon the Shoshonean tribes, aided by the Director's personal supervision. Mr. Jeremiah Curtin, to whom was assigned the California tribes, also gave assistance in other sections.

Each of the gentlemen named has been able to contribute largely to the results by his personal experience and investigations in the field, there being numerous regions concerning which published accounts are meager and unsatisfactory. The main source of the material to be dealt with has, however, been necessarily derived from books. A vast amount of the current literature pertaining to the North American Indians has been examined, amounting to over one thousand volumes, with a view to the extraction of the tribal names and the historical data necessary to fix their precise application.

The work at the present time is well advanced toward completion. The examination of literature for the collation of synonyms may be regarded as practically done. The tables of synonymy and the accounts of the tribes have been completed for more than one-half the number of linguistic families.

ACCOMPANYING PAPERS.

LINGUISTIC FAMILIES OF NORTH AMERICA.

In harmony with custom, three scientific papers accompany this report, designed to illustrate the nature, methods and spirit of the researches conducted by the Bureau. The first is on the "Classification of the North American Languages." It is by no means a final paper on the subject, but is intended rather to give an account of the present status of the subject, and to place before the workers in this field of scholarship the data now existing and the conclusions already reached, so as to constitute a point of departure for new work. With this end in view Mr. Pilling is engaged upon the bibliography of the subject and is rapidly publishing the same, and Mr. Henshaw is employed on the tribal synonymy. Altogether it is hoped that this work will inaugurate a new era in the investigation of the subject by making available the vast body of

material scattered broadcast through the literature relating to the North American Indians.

In the course of these ethnic researches an interesting field of facts has been brought to view relating to the superstitions of the Indians. Already a very large body of mythology has been collected—stories from a great number of tongues which embody the rude philosophy of tribal thought. Such philosophy or opinion finds its expression not only in the mythic tales, but in the organization of the people into society, in their daily life and in their habits and customs. There is a realm of anthropology in this lower state of mankind which we call savagery, that is hard to understand from the standpoint of modern civilization, where science, theology, religion, medicine and the esthetic arts are developed as more or less discrete subjects. In savagery these great subjects are blended in one, as they are interwoven into a vast plexus of thought and action, for mythology is the basis of philosophy, religion, medicine, and art. In savagery the observed facts of the universe, relating alike to physical nature and to the humanities, are explained mythologically, and these mythic conceptions give rise to a great variety of practices. The acts of life are born of the opinions held as explanations of the environing world. Thus it is that philosophy finds expression in a complex system of superstitions, ceremonies and practices, which together constitute the religion of the people. The purpose of these practices is to avert calamity and to secure prosperity in the present life. It is astonishing to find how little the condition of a life to come is involved. The future beyond the grave is scarcely heeded, or when recognized it seems not to affect the daily life of the people to any appreciable degree. That which occupies the attention of the savage mind relates to the pleasures and pains, the joys and sorrows of present existence.

Perhaps the chief motive is derived from the consideration of health and disease, as the pleasures and pains arising therefrom are forever present to the experience or observation. Good and evil are also involved in those gifts of nature to man by which his biotic life is sustained, his food, drink, cloth-

ing and shelter. These bounties come not in a never-changing stream, but are apparently fitful and capricious. Seasons of plenty are accented by seasons of scarcity, and thus prosperity and adversity are strangely commingled in the history of the people. To secure this prosperity and avert this adversity seems to be the second great motive in the development of the superstitious practices of the people. A third occasion for the development of this primitive religion inheres in the social organization of mankind, primarily expressed in the love of man and woman for each other, but finally expressed in all the relations of kin and kith and in the relations of tribe with tribe. This gives rise to a very important development of primitive religion, for the savage man seeks to discover by occult agencies the power of controlling the love and good will of his kind and the power of averting the effect of enmity. To attain these ends he invents a vast system of devices, from love philters to war dances. A fourth region of exploitation in the realm of the esoteric relates to the origin of life itself, as many of their practices are designed to secure perpetuity of life by frequent births and less painful throes.

It will thus be seen that life, health, prosperity, and peace are the ends sought in all this region of human activity as they are presented in the study of savage life. The opinions held by the people on these subjects are primarily expressed in speech and organized into tales, which constitute mythology, and they are expressed in acts, as ceremonies and observances, which constitute their religion, their medicine, and their esthetic arts. These arts consist of sculpture and painting, by which their mythic beings are represented, and they also consist of dancing, by which religious fervor is produced, and they give rise to music, romance, poetry, and drama. Thus it is that the esthetic arts have their origin in mythology. The epic poem and the symphony are lineal descendants of the dance, and the dance arises as the first form of worship, born of the mythic conception of the powers of nature.

THE MIDĒ'WIWIN, OR GRAND MEDICINE SOCIETY OF THE OJIBWA, BY W. J. HOFFMAN, AND THE SACRED FORMULAS OF THE CHEROKEES, BY JAMES MOONEY.

Mr. Hoffman presents a paper on the "Midē'wiwin, or Grand Medicine Society of the Ojibwa," and sets forth the vestiges of a once powerful organization existing among these people. Mr. Mooney has made a study of the Cherokee with the same end in view. In the opinion of the Director they are important contributions to this subject. The same lines of investigation have been carried on by other members of the Bureau with other tribes where societies and practices have been but little modified by the contact of the white man, and where the subject is therefore much more plainly arrayed. In due time these additional researches will be published.

In Mr. Hoffman's paper it is seen that two and a half centuries of association with the white man has not only served to break down this organization to some extent, but has also inculcated in the minds of the Ojibwa a clearer conception of a Great Spirit and a future life than is normal to the savage mind. Mr. Mooney, whose paper largely deals with the use of plants by the Indians for the healing of disease, naïvely compares the pharmacopœia of savagery with that of civilization, assuming that the latter is a standard of scientific truth. Perchance scientific men will make one step in advance of this position, and will be interested in discovering the extent to which savage philosophy is still represented in civilized materia medica as expressed in officinal formulas.

A word in relation to the dramatis personæ of Indian mythology. In all those mythologies which have been studied with any degree of care up to the present time zoic deities greatly prevail, the progenitors and prototypes of the animals of the land, air, and water; yet there are other deities. Chief among these are the sun, moon, stars, fire, and the spirits of mountains and other geographical and natural phenomena. Yet these beings are largely zoomorphic, being considered rather as mythic animals than as mythic men; but it must be understood that the line of demarcation between man and the lower animals is not so clearly presented to the savage mind

as to the civilized mind. In speaking of the theology of the North American Indians as being zoomorphic it must therefore be understood to mean that such is its chief characteristic, but not its exclusive characteristic; and further, it must be understood that it contains by survival many elements from an earlier condition in which hecastotheism prevailed, that is, that the form of philosophy known as animism was generally accepted, and that psychic life, with feeling, thought, and will, was attributed to inanimate things. But more than this, zootheism is not a permanent state of philosophy, but only a stepping-stone to something higher. That something higher may be denominated physitheism, or the worship of the powers and more obtrusive phenomena of nature. In this higher state the sun, the planets, the stars, the winds, the storms, the rainbow, and fire take the leading part. The beginnings of this higher state are to be observed in many of the mythologies of North America. It is worthy of remark that a mythology with its religion subject to the influences of an overwhelming civilization yields first in its zoomorphic elements. Zoic mythology soon degenerates into folk tales of beasts, to be recited by crones to children or told by garrulous old men as amusing stories inherited from past generations; while physitheism is more often incorporated into the compound of paganism and Christianity now held by the more advanced tribes. Notwithstanding this general tendency, zootheism is often, though not to so great an extent, compounded in the same way. The study of this stage of mythology, and of the arts and customs arising therefrom, as they are exhibited among the North American Indians, will ultimately throw a flood of light upon that later stage known as physitheism, or nature worship, now the subject of investigation by an army of Aryan scholars.

FINANCIAL STATEMENT.

Table showing amounts appropriated and expended for North American ethnology for the fiscal year ending June 30, 1886.

Expenses.	Amount expended.	Amount appropriated.
Services	$31,287.93	
Traveling expenses	2,070.71	
Transportation of property	478.91	
Field subsistence	284.99	
Field expenses and supplies	360.32	
Field material	163.61	
Modeling material	63.11	
Photographic material	34.44	
Books and maps	469.69	
Stationery and drawing material	169.44	
Illustrations for reports	289.65	
Goods for distribution to Indians	767.82	
Office furniture	12.00	
Office supplies and repairs	63.56	
Correspondence	13.87	
Specimens	800.00	
Bonded railroad accounts forwarded to Treasury for settlement	103.84	
Balance on hand to meet outstanding liabilities	2,566.11	
Total	40,000.00	$40,000.00

ACCOMPANYING PAPERS.

INDIAN LINGUISTIC FAMILIES OF AMERICA

NORTH OF MEXICO.

BY

J. W. POWELL.

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ILLUSTRATION.

PLATE I. Map. Linguistic stocks of North America north of Mexico. In pocket at end of volume

INDIAN LINGUISTIC FAMILIES.

By J. W. Powell.

NOMENCLATURE OF LINGUISTIC FAMILIES.

The languages spoken by the pre-Columbian tribes of North America were many and diverse. Into the regions occupied by these tribes travelers, traders, and missionaries have penetrated in advance of civilization, and civilization itself has marched across the continent at a rapid rate. Under these conditions the languages of the various tribes have received much study. Many extensive works have been published, embracing grammars and dictionaries; but a far greater number of minor vocabularies have been collected and very many have been published. In addition to these, the Bible, in whole or in part, and various religious books and school books, have been translated into Indian tongues to be used for purposes of instruction; and newspapers have been published in the Indian languages. Altogether the literature of these languages and that relating to them are of vast extent.

While the materials seem thus to be abundant, the student of Indian languages finds the subject to be one requiring most thoughtful consideration, difficulties arising from the following conditions:

(1) A great number of linguistic stocks or families are discovered.

(2) The boundaries between the different stocks of languages are not immediately apparent, from the fact that many tribes of diverse stocks have had more or less association, and to some extent linguistic materials have been borrowed, and thus have passed out of the exclusive possession of cognate peoples.

(3) Where many peoples, each few in number, are thrown together, an intertribal language is developed. To a large extent this is gesture speech; but to a limited extent useful and important words are adopted by various tribes, and out of this material an intertribal "jargon" is established. Travelers and all others who do not thoroughly study a language are far more likely to acquire this jargon speech than the real speech of the people; and the tendency to base relationship upon such jargons has led to confusion.

(4) This tendency to the establishment of intertribal jargons was greatly accelerated on the advent of the white man, for thereby many tribes were pushed from their ancestral homes and tribes were mixed with tribes. As a result, new relations and new industries, especially of trade, were established, and the new associations of tribe with tribe and of the Indians with Europeans led very often to the development of quite elaborate jargon languages. All of these have a tendency to complicate the study of the Indian tongues by comparative methods.

The difficulties inherent in the study of languages, together with the imperfect material and the complicating conditions that have arisen by the spread of civilization over the country, combine to make the problem one not readily solved.

In view of the amount of material on hand, the comparative study of the languages of North America has been strangely neglected, though perhaps this is explained by reason of the difficulties which have been pointed out. And the attempts which have been made to classify them has given rise to much confusion, for the following reasons: First, later authors have not properly recognized the work of earlier laborers in the field. Second, the attempt has more frequently been made to establish an ethnic classification than a linguistic classification, and linguistic characteristics have been confused with biotic peculiarities, arts, habits, customs, and other human activities, so that radical differences of language have often been ignored and slight differences have heen held to be of primary value.

The attempts at a classification of these languages and a corresponding classification of races have led to the development of a complex, mixed, and inconsistent synonymy, which must first be unraveled and a selection of standard names made therefrom according to fixed principles.

It is manifest that until proper rules are recognized by scholars the establishment of a determinate nomenclature is impossible. It will therefore be well to set forth the rules that have here been adopted, together with brief reasons for the same, with the hope that they will commend themselves to the judgment of other persons engaged in researches relating to the languages of North America.

A fixed nomenclature in biology has been found not only to be advantageous, but to be a prerequisite to progress in research, as the vast multiplicity of facts, still ever accumulating, would otherwise overwhelm the scholar. In philological classification fixity of nomenclature is of corresponding importance; and while the analogies between linguistic and biotic classification are quite limited, many of the principles of nomenclature which biologists have adopted having no application in philology, still in some important particulars the requirements of all scientific classifications are alike,

and though many of the nomenclatural points met with in biology will not occur in philology, some of them do occur and may be governed by the same rules.

Perhaps an ideal nomenclature in biology may some time be established, as attempts have been made to establish such a system in chemistry; and possibly such an ideal system may eventually be established in philology. Be that as it may, the time has not yet come even for its suggestion. What is now needed is a rule of some kind leading scholars to use the same terms for the same things, and it would seem to matter little in the case of linguistic stocks what the nomenclature is, provided it becomes denotive and universal.

In treating of the languages of North America it has been suggested that the names adopted should be the names by which the people recognize themselves, but this is a rule of impossible application, for where the branches of a stock diverge very greatly no common name for the people can be found. Again, it has been suggested that names which are to go permanently into science should be simple and euphonic. This also is impossible of application, for simplicity and euphony are largely questions of personal taste, and he who has studied many languages loses speedily his idiosyncrasies of likes and dislikes and learns that words foreign to his vocabulary are not necessarily barbaric.

Biologists have decided that he who first distinctly characterizes and names a species or other group shall thereby cause the name thus used to become permanently affixed, but under certain conditions adapted to a growing science which is continually revising its classifications. This law of priority may well be adopted by philologists.

By the application of the law of priority it will occasionally happen that a name must be taken which is not wholly unobjectionable or which could be much improved. But if names may be modified for any reason, the extent of change that may be wrought in this manner is unlimited, and such modifications would ultimately become equivalent to the introduction of new names, and a fixed nomenclature would thereby be overthrown. The rule of priority has therefore been adopted.

Permanent biologic nomenclature dates from the time of Linnæus simply because this great naturalist established the binominal system and placed scientific classification upon a sound and enduring basis. As Linnæus is to be regarded as the founder of biologic classification, so Gallatin may be considered the founder of systematic philology relating to the North American Indians. Before his time much linguistic work had been accomplished, and scholars owe a lasting debt of gratitude to Barton, Adelung, Pickering, and others. But Gallatin's work marks an era in American linguistic science from the fact that he so thoroughly introduced comparative methods, and because he circumscribed the boundaries of many

families, so that a large part of his work remains and is still to be considered sound. There is no safe resting place anterior to Gallatin, because no scholar prior to his time had properly adopted comparative methods of research, and because no scholar was privileged to work with so large a body of material. It must further be said of Gallatin that he had a very clear conception of the task he was performing, and brought to it both learning and wisdom. Gallatin's work has therefore been taken as the starting point, back of which we may not go in the historic consideration of the systematic philology of North America. The point of departure therefore is the year 1836, when Gallatin's "Synopsis of Indian Tribes" appeared in vol. 2 of the Transactions of the American Antiquarian Society.

It is believed that a name should be simply a denotive word, and that no advantage can accrue from a descriptive or connotive title. It is therefore desirable to have the names as simple as possible, consistent with other and more important considerations. For this reason it has been found impracticable to recognize as family names designations based on several distinct terms, such as descriptive phrases, and words compounded from two or more geographic names. Such phrases and compound words have been rejected.

There are many linguistic families in North America, and in a number of them there are many tribes speaking diverse languages. It is important, therefore, that some form should be given to the family name by which it may be distinguished from the name of a single tribe or language. In many cases some one language within a stock has been taken as the type and its name given to the entire family; so that the name of a language and that of the stock to which it belongs are identical. This is inconvenient and leads to confusion. For such reasons it has been decided to give each family name the termination "an" or "ian."

Conforming to the principles thus enunciated, the following rules have been formulated:

I. The law of priority relating to the nomenclature of the systematic philology of the North American tribes shall not extend to authors whose works are of date anterior to the year 1836.

II. The name originally given by the founder of a linguistic group to designate it as a family or stock of languages shall be permanently retained to the exclusion of all others.

III. No family name shall be recognized if composed of more than one word.

IV. A family name once established shall not be canceled in any subsequent division of the group, but shall be retained in a restricted sense for one of its constituent portions.

V. Family names shall be distinguished as such by the termination "an" or "ian."

VI. No name shall be accepted for a linguistic family unless used to designate a tribe or group of tribes as a linguistic stock.

VII. No family name shall be accepted unless there is given the habitat of tribe or tribes to which it is applied.

VIII. The original orthography of a name shall be rigidly preserved except as provided for in rule III, and unless a typographical error is evident.

The terms "family" and "stock" are here applied interchangeably to a group of languages that are supposed to be cognate.

A single language is called a stock or family when it is not found to be cognate with any other language. Languages are said to be cognate when such relations between them are found that they are supposed to have descended from a common ancestral speech. The evidence of cognation is derived exclusively from the vocabulary. Grammatic similarities are not supposed to furnish evidence of cognation, but to be phenomena, in part relating to stage of culture and in part adventitious. It must be remembered that extreme peculiarities of grammar, like the vocal mutations of the Hebrew or the monosyllabic separation of the Chinese, have not been discovered among Indian tongues. It therefore becomes necessary in the classification of Indian languages into families to neglect grammatic structure, and to consider lexical elements only. But this statement must be clearly understood. It is postulated that in the growth of languages new words are formed by combination, and that these new words change by attrition to secure economy of utterance, and also by assimilation (analogy) for economy of thought. In the comparison of languages for the purposes of systematic philology it often becomes necessary to dismember compounded words for the purpose of comparing the more primitive forms thus obtained. The paradigmatic words considered in grammatic treatises may often be the very words which should be dissected to discover in their elements primary affinities. But the comparison is still lexic, not grammatic.

A lexic comparison is between vocal elements; a grammatic comparison is between grammatic methods, such, for example, as gender systems. The classes into which things are relegated by distinction of gender may be animate and inanimate, and the animate may subsequently be divided into male and female, and these two classes may ultimately absorb, in part at least, inanimate things. The growth of a system of genders may take another course. The animate and inanimate may be subdivided into the standing, the sitting, and the lying, or into the moving, the erect and the reclined; or, still further, the superposed classification may be based upon the supposed constitution of things, as the fleshy, the woody, the rocky, the earthy, the watery. Thus the number of genders may increase, while further on in the history of a language the genders may

decrease so as almost to disappear. All of these characteristics are in part adventitious, but to a large extent the gender is a phenomenon of growth, indicating the stage to which the language has attained. A proper case system may not have been established in a language by the fixing of case particles, or, having been established, it may change by the increase or diminution of the number of cases. A tense system also has a beginning, a growth, and a decadence. A mode system is variable in the various stages of the history of a language. In like manner a pronominal system undergoes changes. Particles may be prefixed; infixed, or affixed in compounded words, and which one of these methods will finally prevail can be determined only in the later stage of growth. All of these things are held to belong to the grammar of a language and to be grammatic methods, distinct from lexical elements.

With terms thus defined, languages are supposed to be cognate when fundamental similarities are discovered in their lexical elements. When the members of a family of languages are to be classed in subdivisions and the history of such languages investigated, grammatic characteristics become of primary importance. The words of a language change by the methods described, but the fundamental elements or roots are more enduring. Grammatic methods also change, perhaps even more rapidly than words, and the changes may go on to such an extent that primitive methods are entirely lost, there being no radical grammatic elements to be preserved. Grammatic structure is but a phase or accident of growth, and not a primordial element of language. The roots of a language are its most permanent characteristics, and while the words which are formed from them may change so as to obscure their elements or in some cases even to lose them, it seems that they are never lost from all, but can be recovered in large part. The grammatic structure or plan of a language is forever changing, and in this respect the language may become entirely transformed.

LITERATURE RELATING TO THE CLASSIFICATION OF INDIAN LANGUAGES.

While the literature relating to the languages of North America is very extensive, that which relates to their classification is much less extensive. For the benefit of future students in this line it is thought best to present a concise account of such literature, or at least so much as has been consulted in the preparation of this paper.

1836. Gallatin (Albert).

A synopsis of the Indian tribes within the United States east of the Rocky Mountains, and in the British and Russian possessions in North America. In Transactions and Collections of the American Antiquarian Society (Archæologia Americana) Cambridge, 1836, vol. 2.

The larger part of the volume consists of Gallatin's paper. A short chapter is devoted to general observations, including certain

historical data, and the remainder to the discussion of linguistic material and the affinities of the various tribes mentioned. Vocabularies of many of the families are appended. Twenty-eight linguistic divisions are recognized in the general table of the tribes. Some of these divisions are purely geographic, such as the tribes of Salmon River, Queen Charlotte's Island, etc. Vocabularies from these localities were at hand, but of their linguistic relations the author was not sufficiently assured. Most of the linguistic families recognized by Gallatin were defined with much precision. Not all of his conclusions are to be accepted in the presence of the data now at hand, but usually they were sound, as is attested by the fact that they have constituted the basis for much classificatory work since his time.

The primary, or at least the ostensible, purpose of the colored map which accompanies Gallatin's paper was, as indicated by its title, to show the distribution of the tribes, and accordingly their names appear upon it, and not the names of the linguistic families. Nevertheless, it is practically a map of the linguistic families as determined by the author, and it is believed to be the first attempted for the area represented. Only eleven of the twenty-eight families named in this table appear, and these represent the families with which he was best acquainted. As was to be expected from the early period at which the map was constructed, much of the western part of the United States was left uncolored. Altogether the map illustrates well the state of knowledge of the time.

1840. Bancroft (George).
History of the colonization of the United States, Boston, 1840, vol. 3.

In Chapter XXII of this volume the author gives a brief synopsis of the Indian tribes east of the Mississippi, under a linguistic classification, and adds a brief account of the character and methods of Indian languages. A linguistic map of the region is incorporated, which in general corresponds with the one published by Gallatin in 1836. A notable addition to the Gallatin map is the inclusion of the Uchees in their proper locality. Though considered a distinct family by Gallatin, this tribe does not appear upon his map. Moreover, the Choctaws and Muskogees, which appear as separate families upon Gallatin's map (though believed by that author to belong to the same family), are united upon Bancroft's map under the term Mobilian.

The linguistic families treated of are, I. Algonquin, II. Sioux or Dahcota, III. Huron-Iroquois, IV. Catawba, V. Cherokee, VI. Uchee, VII. Natchez, VIII. Mobilian.

1841. Scouler (John).
Observations of the indigenous tribes of the northwest coast of America. In Journal of the Royal Geographical Society of London. London, 1841, vol. 11.

The chapter cited is short, but long enough to enable the author to construct a very curious classification of the tribes of which he

treats. In his account Scouler is guided chiefly, to use his own words, "by considerations founded on their physical character, manners and customs, and on the affinities of their languages." As the linguistic considerations are mentioned last, so they appear to be the least weighty of his "considerations."

Scouler's definition of a family is very broad indeed, and in his "Northern Family," which is a branch of his "Insular Group," he includes such distinct linguistic stocks as "all the Indian tribes in the Russian territory," the Queen Charlotte Islanders, Koloshes, Ugalentzes, Atnas, Kolchans, Kenáïes, Tun Ghaase, Haidahs, and Chimmesyans. His Nootka-Columbian family is scarcely less incongruous, and it is evident that the classification indicated is only to a comparatively slight extent linguistic.

1846. Hale (Horatio).
United States exploring expedition, during the years 1838, 1839, 1840, 1841, 1842, under the command of Charles Wilkes, U. S. Navy, vol. 6, ethnography and philology. Philadelphia, 1846.

In addition to a large amount of ethnographic data derived from the Polynesian Islands, Micronesian Islands, Australia, etc., more than one-half of this important volume is devoted to philology, a large share relating to the tribes of northwestern America.

The vocabularies collected by Hale, and the conclusions derived by him from study of them, added much to the previous knowledge of the languages of these tribes. His conclusions and classification were in the main accepted by Gallatin in his linguistic writings of 1848.

1846. Latham (Robert Gordon).
Miscellaneous contributions to the ethnography of North America. In Proceedings of the Philological Society of London. London, 1846, vol. 2.

In this article, which was read before the Philological Society, January 24, 1845, a large number of North American languages are examined and their affinities discussed in support of the two following postulates made at the beginning of the paper: First, "No American language has an isolated position when compared with the other tongues en masse rather than with the language of any particular class;" second, "The affinities between the language of the New World, as determined by their *vocabularies*, is not less real than that inferred from the analogies of their *grammatical structure*." The author's conclusions are that both statements are substantiated by the evidence presented. The paper contains no new family names.

1847. Prichard (James Cowles).
Researches into the physical history of mankind (third edition), vol. 5, containing researches into the history of the Oceanic and of the American nations. London, 1847.

It was the purpose of this author, as avowed by himself, to determine whether the races of men are the cooffspring of a single stock or have descended respectively from several original families. Like

other authors on this subject, his theory of what should constitute a race was not clearly defined. The scope of the inquiry required the consideration of a great number of subjects and led to the accumulation of a vast body of facts. In volume 5 the author treats of the American Indians, and in connection with the different tribes has something to say of their languages. No attempt at an original classification is made, and in the main the author follows Gallatin's classification and adopts his conclusions.

1848. Gallatin (Albert).
Hale's Indians of Northwest America, and vocabularies of North America, with an introduction. In Transactions of the American Ethnological Society, New York, 1848, vol. 2.

The introduction consists of a number of chapters, as follows: First, Geographical notices and Indian means of subsistence; second, Ancient semi-civilization of New Mexico, Rio Gila and its vicinity; third, Philology; fourth, Addenda and miscellaneous. In these are brought together much valuable information, and many important deductions are made which illustrate Mr. Gallatin's great acumen. The classification given is an amplification of that adopted in 1836, and contains changes and additions. The latter mainly result from a consideration of the material supplied by Mr. Hale, or are simply taken from his work.

The groups additional to those contained in the Archæologia Americana are:

1. Arrapahoes.
2. Jakon.
3. Kalapuya.
4. Kitunaha.
5. Lutuami.
6. Palainih.
7. Sahaptin.
8. Selish (Tsihaili-Selish).
9. Saste.
10. Waiilatpu.

1848. Latham (Robert Gordon).
On the languages of the Oregon Territory. In Journal of the Ethnological Society of London, Edinburgh, 1848, vol. 1.

This paper was read before the Ethnological Society on the 11th of December. The languages noticed are those that lie between "Russian America and New California," of which the author aims to give an exhaustive list. He discusses the value of the groups to which these languages have been assigned, viz, Athabascan and Nootka-Columbian, and finds that they have been given too high value, and that they are only equivalent to the primary subdivisions of *stocks*, like the Gothic, Celtic, and Classical, rather than to the stocks themselves. He further finds that the Athabascan, the Kolooch, the Nootka-Columbian, and the Cadiak groups are subordinate members of one large and important class—the Eskimo.

No new linguistic groups are presented.

1848. Latham (Robert Gordon).
On the ethnography of Russian America. In Journal of the Ethnological Society of London, Edinburgh, 1848, vol. 1.

This essay was read before the Ethnological Society February 19, 1845. Brief notices are given of the more important tribes, and the languages are classed in two groups, the Eskimaux and the Kolooch. Each of these groups is found to have affinities—

(1) With the Athabascan tongues, and perhaps equal affinities.

(2) Each has affinities with the Oregon languages, and each perhaps equally.

(3) Each has definite affinities with the languages of New California, and each perhaps equal ones.

(4) Each has miscellaneous affinities with all the other tongues of North and South America.

1848. Berghaus (Heinrich).

Physikalischer Atlas oder Sammlung von Karten, auf denen die hauptsächlichsten erscheinungen der anorganischen und organischen Natur nach ihrer geographischen Verbreitung und Vertheilung bildlich dargestellt sind. Zweiter Band, Gotha, 1848.

This, the first edition of this well known atlas, contains, among other maps, an ethnographic map of North America, made in 1845. It is based, as is stated, upon material derived from Gallatin, Humboldt, Clavigero, Hervas, Vater, and others. So far as the eastern part of the United States is concerned it is largely a duplication of Gallatin's map of 1836, while in the western region a certain amount of new material is incorporated.

1852. In the edition of 1852 the ethnographic map bears date of 1851. Its eastern portion is substantially a copy of the earlier edition, but its western half is materially changed, chiefly in accordance with the knowledge supplied by Hall in 1848.

Map number 72 of the last edition of Berghaus by no means marks an advance upon the edition of 1852. Apparently the number of families is much reduced, but it is very difficult to interpret the meaning of the author, who has attempted on the same map to indicate linguistic divisions and tribal habitats with the result that confusion is made worse confounded.

1853. Gallatin (Albert).

Classification of the Indian Languages; a letter inclosing a table of generic Indian Families of languages. In Information respecting the History, Condition, and Prospects of the Indian Tribes of the United States, by Henry R. Schoolcraft. Philadelphia, 1853, vol. 3.

This short paper by Gallatin consists of a letter addressed to W. Medill, Commissioner of Indian Affairs, requesting his cooperation in an endeavor to obtain vocabularies to assist in a more complete study of the grammar and structure of the languages of the Indians of North America. It is accompanied by a "Synopsis of Indian Tribes," giving the families and tribes so far as known. In the main the classification is a repetition of that of 1848, but it differs from that in a number of particulars. Two of the families of 1848 do not

appear in this paper, viz, Arapaho and Kinai. Queen Charlotte Island, employed as a family name in 1848, is placed under the Wakash family, while the Skittagete language, upon which the name Queen Charlotte Island was based in 1848, is here given as a family designation for the language spoken at "Sitka, bet. 52 and 59 lat." The following families appear which are not contained in the list of 1848:

1. Cumanches.
2. Gros Ventres.
3. Kaskaias.
4. Kiaways.
5. Natchitoches.
6. Pani, Towiacks.
7. Ugaljachmutzi.

1853. Gibbs (George).

Observations on some of the Indian dialects of northern California. In Information respecting the History, Condition, and Prospects of the Indian tribes of the United States, by Henry R. Schoolcraft. Philadelphia, 1853, vol. 3.

The "Observations" are introductory to a series of vocabularies collected in northern California, and treat of the method employed in collecting them and of the difficulties encountered. They also contain notes on the tribes speaking the several languages as well as on the area covered. There is comparatively little of a classificatory nature, though in one instance the name Quoratem is proposed as a proper one for the family "should it be held one."

1854. Latham (Robert Gordon).

On the languages of New California. In Proceedings of the Philological Society of London for 1852 and 1853. London, 1854, vol. 6.

Read before the Philological Society, May 13, 1853. A number of languages are examined in this paper for the purpose of determining the stocks to which they belong and the mutual affinities of the latter. Among the languages mentioned are the Saintskla, Umkwa, Lutuami, Paduca, Athabascan, Dieguno, and a number of the Mission languages.

1855. Lane (William Carr).

Letter on affinities of dialects in New Mexico. In Information respecting the History, Condition, and Prospects of the Indian tribes of the United States, by Henry R. Schoolcraft. Philadelphia, 1855, vol. 5.

The letter forms half a page of printed matter. The gist of the communication is in effect that the author has heard it said that the Indians of certain pueblos speak three different languages, which he has heard called, respectively, (1) Chu-cha-cas and Kes-whaw-hay; (2) E-nagh-magh; (3) Tay-waugh. This can hardly be called a classification, though the arrangement of the pueblos indicated by Lane is quoted at length by Keane in the Appendix to Stanford's Compendium.

1856. Latham (Robert Gordon).

On the languages of Northern, Western, and Central America. In Transactions of the Philological Society of London, for 1856. London [1857?].

This paper was read before the Philological Society May 9, 1856, and is stated to be "a supplement to two well known contributions to American philology by the late A. Gallatin."

So far as classification of North American languages goes, this is perhaps the most important paper of Latham's, as in it a number of new names are proposed for linguistic groups, such as Copeh for the Sacramento River tribes, Ehnik for the Karok tribes, Mariposa Group and Mendocino Group for the Yokut and Pomo tribes respectively, Moquelumne for the Mutsun, Pujuni for the Meidoo, Weitspek for the Eurocs.

1856. Turner (William Wadden).

Report upon the Indian tribes, by Lieut. A. W. Whipple, Thomas Ewbank, esq., and Prof. William W. Turner, Washington, D. C., 1855. In Reports of Explorations and Surveys to ascertain the most practicable and economical route for a railroad from the Mississippi to the Pacific Ocean. Washington, 1856, vol. 3, part 3.

Chapter v of the above report is headed "Vocabularies of North American Languages," and is by Turner, as is stated in a foot-note. Though the title page of Part III is dated 1855, the chapter by Turner was not issued till 1856, the date of the full volume, as is stated by Turner on page 84. The following are the vocabularies given, with their arrangement in families:

I. Delaware. } Algonkin.
II. Shawnee. }
III. Choctaw.
IV. Kichai. } Pawnee?
V. Huéco. }
VI. Caddo.
VII. Comanche. }
VIII. Chemehuevi. } Shoshonee.
IX. Cahuillo. }
X. Kioway.

XI. Navajo. } Apache.
XII. Pinal Leño. }
XIII. Kiwomi. }
XIV. Cochitemi. } Keres.
XV. Acoma. }
XVI. Zuñi.
XVII. Pima.
XVIII. Cuchan. }
XIX. Coco-Maricopa. } Yuma.
XX. Mojave. }
XXI. Diegeno. }

Several of the family names, viz, Keres, Kiowa, Yuma, and Zuñi, have been adopted under the rules formulated above.

1858. Buschmann (Johann Carl Eduard).

Die Völker und Sprachen Neu-Mexiko's und der Westseite des britischen Nordamerika's, dargestellt von Hrn. Buschmann. In Abhandlungen (aus dem Jahre 1857) der königlichen Akademie der Wissenschaften zu Berlin. Berlin, 1858.

This work contains a historic review of early discoveries in New Mexico and of the tribes living therein, with such vocabularies as were available at the time. On pages 315–414 the tribes of British America, from about latitude 54° to 60°, are similarly treated, the various discoveries being reviewed; also those on the North Pacific coast. Much of the material should have been inserted in the

volume of 1859 (which was prepared in 1854), to which cross reference is frequently made, and to which it stands in the nature of a supplement.

1859. Buschmann (Johann Carl Eduard).
Die Spuren der aztekischen Sprache im nördlichen Mexico und höheren amerikanischen Norden. Zugleich eine Musterung der Völker und Sprachen des nördlichen Mexico's und der Westseite Nordamerika's von Guadalaxara an bis zum Eismeer. In Abhandlungen aus dem Jahre 1854 der königlichen Akademie der Wissenschaften zu Berlin. Berlin, 1859.

The above, forming a second supplemental volume of the Transactions for 1854, is an extensive compilation of much previous literature treating of the Indian tribes from the Arctic Ocean southward to Guadalajara, and bears specially upon the Aztec language and its traces in the languages of the numerous tribes scattered along the Pacific Ocean and inland to the high plains. A large number of vocabularies and a vast amount of linguistic material are here brought together and arranged in a comprehensive manner to aid in the study attempted. In his classification of the tribes east of the Rocky Mountains, Buschmann largely followed Gallatin. His treatment of those not included in Gallatin's paper is in the main original. Many of the results obtained may have been considered bold at the time of publication, but recent philological investigations give evidence of the value of many of the author's conclusions.

1859. Kane (Paul).
Wanderings of an artist among the Indians of North America from Canada to Vancouver's Island and Oregon through the Hudson's Bay Company's territory and back again. London, 1859.

The interesting account of the author's travels among the Indians, chiefly in the Northwest, and of their habits, is followed by a four-page supplement, giving the names, locations, and census of the tribes of the Northwest coast. They are classified by language into Chymseyan, including the Nass, Chymseyans, Skeena and Sabassas Indians, of whom twenty-one tribes are given; Ha-eelb-zuk or Ballabola, including the Milbank Sound Indians, with nine tribes; Klen-e-kate, including twenty tribes; Hai-dai, including the Kygargey and Queen Charlotte's Island Indians, nineteen tribes being enumerated; and Qua-colth, with twenty-nine tribes. No statement of the origin of these tables is given, and they reappear, with no explanation, in Schoolcraft's Indian Tribes, volume v, pp. 487–489.

In his Queen Charlotte Islands, 1870, Dawson publishes the part of this table relating to the Haida, with the statement that he received it from Dr. W. F. Tolmie. The census was made in 1836–'41 by the late Mr. John Work, who doubtless was the author of the more complete tables published by Kane and Schoolcraft.

1862. Latham (Robert Gordon).
Elements of comparative philology. London, 1862.

The object of this volume is, as the author states in his preface, "to lay before the reader the chief facts and the chief trains of reasoning in Comparative Philology." Among the great mass of material accumulated for the purpose a share is devoted to the languages of North America. The remarks under these are often taken verbatim from the author's earlier papers, to which reference has been made above, and the family names and classification set forth in them are substantially repeated.

1862. Hayden (Ferdinand Vandeveer).
Contributions to the ethnography and philology of the Indian tribes of the Missouri Valley. Philadelphia, 1862.

This is a valuable contribution to our knowledge of the Missouri River tribes, made at a time when the information concerning them was none too precise. The tribes treated of are classified as follows:

I.	Knisteneaux, or Crees.	Algonkin Group, A.
II.	Blackfeet.	
III.	Shyennes.	
IV.	Arapohos.	Arapoho Group, B.
V.	Atsinas.	
VI.	Pawnees.	Pawnee Group, C.
VII.	Arikaras.	
VIII.	Dakotas.	Dakota Group, D
IX.	Assiniboins.	
X.	Crows.	
XI.	Minnitarees.	
XII.	Mandans.	
XIII.	Omahas.	
XIV.	Iowas.	

1864. Orozco y Berra (Manuel).
Geografía de las Lenguas y Carta Etnográfica de México Precedidas de un ensayo de clasificacion de las mismas lenguas y de apuntes para las inmigraciones de las tribus. Mexico, 1864.

The work is divided into three parts. (1) Tentative classification of the languages of Mexico; (2) notes on the immigration of the tribes of Mexico; (3) geography of the languages of Mexico.

The author states that he has no knowledge whatever of the languages he treats of. All he attempts to do is to summarize the opinions of others. His authorities were (1) writers on native grammars; (2) missionaries; (3) persons who are reputed to be versed in such matters. He professes to have used his own judgment only when these authorities left him free to do so.

His stated method in compiling the ethnographic map was to place before him the map of a certain department, examine all his authorities bearing on that department, and to mark with a distinctive color all localities said to belong to a particular language. When this was done he drew a boundary line around the area of that language. Examination of the map shows that he has partly expressed on it the classification of languages as given in the first part of his text, and partly limited himself to indicating the geographic boundaries

of languages, without, however, giving the boundaries of all the languages mentioned in his lists.

1865. Pimentel (Francisco).
Cuadro Descriptivo y Comparativo de las Lenguas Indígenas de México. México, 1865.

According to the introduction this work is divided into three parts: (1) descriptive; (2) comparative; (3) critical.

The author divides the treatment of each language into (1) its mechanism; (2) its dictionary; (3) its grammar. By "mechanism" he means pronunciation and composition; by "dictionary" he means the commonest or most notable words.

In the case of each language he states the localities where it is spoken, giving a short sketch of its history, the explanation of its etymology, and a list of such writers on that language as he has become acquainted with. Then follows: "mechanism, dictionary, and grammar." Next he enumerates its dialects if there are any, and compares specimens of them when he is able. He gives the Our Father when he can.

Volume I (1862) contains introduction and twelve languages. Volume II (1865) contains fourteen groups of languages, a vocabulary of the Opata language, and an appendix treating of the Comanche, the Coahuilteco, and various languages of upper California.

Volume III (announced in preface of Volume II) is to contain the "comparative part" (to be treated in the same "mixed" method as the "descriptive part"), and a scientific classification of all the languages spoken in Mexico.

In the "critical part" (apparently dispersed through the other two parts) the author intends to pass judgment on the merits of the languages of Mexico, to point out their good qualities and their defects.

1870. Dall (William Healey).
On the distribution of the native tribes of Alaska and the adjacent territory. In Proceedings of the American Association for the Advancement of Science. Cambridge, 1870, vol. 18.

In this important paper is presented much interesting information concerning the inhabitants of Alaska and adjacent territories. The natives are divided into two groups, the Indians of the interior, and the inhabitants of the coast, or Esquimaux. The latter are designated by the term Orarians, which are composed of three lesser groups, Eskimo, Aleutians, and Tuski. The Orarians are distinguished, first, by their language; second, by their distribution; third, by their habits; fourth, by their physical characteristics.

1870. Dall (William Healey).
Alaska and its Resources. Boston, 1870.

The classification followed is practically the same as is given in the author's article in the Proceedings of the American Association for the Advancement of Science.

1877. Dall (William Healey).
Tribes of the extreme northwest. In Contributions to North American Ethnology (published by United States Geographical and Geological Survey of the Rocky Mountain Region). Washington, 1877, vol. 1.

This is an amplification of the paper published in the Proceedings of the American Association, as above cited. The author states that "numerous additions and corrections, as well as personal observations of much before taken at second hand, have placed it in my power to enlarge and improve my original arrangement."

In this paper the Orarians are divided into "two well marked groups," the Innuit, comprising all the so-called Eskimo and Tuskis, and the Aleuts. The paper proper is followed by an appendix by Gibbs and Dall, in which are presented a series of vocabularies from the northwest, including dialects of the Tlinkit and Haida nations, T'sim-si-ans, and others.

1877. Gibbs (George).
Tribes of Western Washington and Northwestern Oregon. In Contributions to North American Ethnology. Washington, 1887, vol. 1.

This is a valuable article, and gives many interesting particulars of the tribes of which it treats. References are here and there made to the languages of the several tribes, with, however, no attempt at their classification. A table follows the report, in which is given by Dall, after Gibbs, a classification of the tribes mentioned by Gibbs. Five families are mentioned, viz: Nūtka, Sahaptin, Tinneh, Selish, and T'sinūk. The comparative vocabularies follow Part II.

1877. Powers (Stephen).
Tribes of California. In Contributions to North American Ethnology. Washington, 1877, vol. 3.

The extended paper on the Californian tribes which makes up the bulk of this volume is the most important contribution to the subject ever made. The author's unusual opportunities for personal observation among these tribes were improved to the utmost and the result is a comparatively full and comprehensive account of their habits and character.

Here and there are allusions to the languages spoken, with reference to the families to which the tribes belong. No formal classification is presented.

1877. Powell (John Wesley).
Appendix. Linguistics edited by J. W. Powell. In Contributions to North American Ethnology. Washington, 1877, vol. 3.

This appendix consists of a series of comparative vocabularies collected by Powers, Gibbs and others, classified into linguistic families, as follows:

Family.	Family.
1. Ká-rok.	8. Mût'-sūn.
2. Yú-rok.	9. Santa Barbara.
3. Chim-a-rí-ko.	10. Yó-kuts.
4. Wish-osk.	11. Mai'-du.
5. Yú-ki.	12. A-cho-mâ'-wi.
6. Pómo.	13. Shas-ta.
7. Win-tūn'.	

1877. Gatschet (Albert Samuel).
Indian languages of the Pacific States and Territories. In Magazine of American History. New York, 1877, vol. 1.

After some remarks concerning the nature of language and of the special characteristics of Indian languages, the author gives a synopsis of the languages of the Pacific region. The families mentioned are:

1. Shóshoni.	11. Pomo.	21. Yakon.
2. Yuma.	12. Wishosk.	22. Cayuse.
3. Pima.	13. Eurok.	23. Kalapuya.
4. Santa Barbara.	14. Weits-pek.	24. Chinook.
5. Mutsun.	15. Cahrok.	25. Sahaptin.
6. Yocut.	16. Tolewa.	26. Selish.
7. Meewoc.	17. Shasta.	27. Nootka.
8. Meidoo.	18. Pit River.	28. Kootenai.
9. Wintoon.	19. Klamath.	
10. Yuka.	20. Tinné.	

This is an important paper, and contains notices of several new stocks, derived from a study of the material furnished by Powers.

The author advocates the plan of using a system of nomenclature similar in nature to that employed in zoology in the case of generic and specific names, adding after the name of the tribe the family to which it belongs; thus: Warm Springs, Sahaptin. .

1878. Powell (John Wesley).
The nationality of the Pueblos. In the Rocky Mountain Presbyterian. Denver, November, 1878.

This is a half-column article, the object of which is to assign the several Pueblos to their proper stocks. A paragraph is devoted to contradicting the popular belief that the Pueblos are in some way related to the Aztecs. No vocabularies are given or cited, though the classification is stated to be a linguistic one.

1878. Keane (Augustus H).
Appendix. Ethnography and philology of America. In Stanford's Compendium of Geography and Travel, edited and extended by H. W. Bates. London, 1878.

In the appendix are given, first, some of the more general characteristics and peculiarities of Indian languages, followed by a classification of all the tribes of North America, after which is given an

alphabetical list of American tribes and languages, with their habitats and the stock to which they belong.

The classification is compiled from many sources, and although it contains many errors and inconsistencies, it affords on the whole a good general idea of prevalent views on the subject.

1880. Powell (John Wesley).
Puebio Indians. In the American Naturalist. Philadelphia, 1880, vol. 14.

This is a two-page article in which is set forth a classification of the Pueblo Indians from linguistic considerations. The Pueblos are divided into four families or stocks, viz:

1. Shínumo.
2. Zunian.
3. Kéran.
4. Téwan.

Under the several stocks is given a list of those who have collected vocabularies of these languages and a reference to their publication.

1880. Eells (Myron).
The Twana language of Washington Territory. In the American Antiquarian. Chicago, 1880–'81, vol. 3.

This is a brief article—two and a half pages—on the Twana, Clallam, and Chemakum Indians. The author finds, upon a comparison of vocabularies, that the Chemakum language has little in common with its neighbors.

1885. Dall (William Healey).
The native tribes of Alaska. In Proceedings of the American Association for the Advancement of Science, thirty-fourth meeting, held at Ann Arbor, Mich., August, 1885. Salem, 1886.

This paper is a timely contribution to the subject of the Alaska tribes, and carries it from the point at which the author left it in 1869 to date, briefly summarizing the several recent additions to knowledge. It ends with a geographical classification of the Innuit and Indian tribes of Alaska, with estimates of their numbers.

1885. Bancroft (Hubert Howe).
The works of Hubert Howe Bancroft, vol. 3: the native races, vol. 3, myths and languages. San Francisco, 1882.

In the chapter on that subject the languages are classified by divisions which appear to correspond to groups, families, tribes, and dialects.

The classification does not, however, follow any consistent plan, and is in parts unintelligible.

1882. Gatschet (Albert Samuel).
Indian languages of the Pacific States and Territories and of the Pueblos of New Mexico. In the Magazine of American History. New York, 1882, vol. 8.

This paper is in the nature of a supplement to a previous one in the same magazine above referred to. It enlarges further on several

of the stocks there considered, and, as the title indicates, treats also of the Pueblo languages. The families mentioned are:

1. Chimariko.
2. Washo.
3. Yákona.
4. Sayúskla.
5. Kúsa.
6. Takilma.
7. Rio Grande Pueblo.
8. Kera.
9. Zuñi.

1883. Hale (Horatio).
Indian migrations, as evidenced by language. In The American Antiquarian and Oriental Journal. Chicago, 1883, vol. 5.

In connection with the object of this paper—the study of Indian migrations—several linguistic stocks are mentioned, and the linguistic affinities of a number of tribes are given. The stocks mentioned are:

Huron-Cherokee.
Dakota.
Algonkin.
Chahta-Muskoki.

1885. Tolmie (W. Fraser) and Dawson (George M.)
Comparative vocabularies of the Indian tribes of British Columbia, with a map illustrating distribution (Geological and Natural History Survey of Canada). Montreal, 1884.

The vocabularies presented constitute an important contribution to linguistic science. They represent "one or more dialects of every Indian language spoken on the Pacific slope from the Columbia River north to the Tshilkat River, and beyond, in Alaska; and from the outermost sea-board to the main continental divide in the Rocky Mountains." A colored map shows the area occupied by each linguistic family.

LINGUISTIC MAP.

In 1836 Gallatin conferred a great boon upon linguistic students by classifying all the existing material relating to this subject. Even in the light of the knowledge of the present day his work is found to rest upon a sound basis. The material of Gallatin's time, however, was too scanty to permit of more than an outline of the subject. Later writers have contributed to the work, and the names of Latham, Turner, Prichard, Buschmann, Hale, Gatschet, and others are connected with important classificatory results.

The writer's interest in linguistic work and the inception of a plan for a linguistic classification of Indian languages date back about 20 years, to a time when he was engaged in explorations in the West. Being brought into contact with many tribes, it was possible to collect a large amount of original material. Subsequently, when the Bureau of Ethnology was organized, this store was largely increased through the labors of others. Since then a very large body of literature published in Indian languages has been accumulated, and a great number of vocabularies have been gathered by the Bureau

assistants and by collaborators in various parts of the country. The results of a study of all this material, and of much historical data, which necessarily enters largely into work of this character, appear in the accompanying map.

The contributions to the subject during the last fifty years have been so important, and the additions to the material accessible to the student of Gallatin's time have been so large, that much of the reproach which deservedly attached to American scholars because of the neglect of American linguistics has been removed. The field is a vast one, however, and the workers are comparatively few. Moreover, opportunities for collecting linguistic material are growing fewer day by day, as tribes are consolidated upon reservations, as they become civilized, and as the older Indians, who alone are skilled in their language, die, leaving, it may be, only a few imperfect vocabularies as a basis for future study. History has bequeathed to us the names of many tribes, which became extinct in early colonial times, of whose language not a hint is left and whose linguistic relations must ever remain unknown.

It is vain to grieve over neglected opportunities unless their contemplation stimulates us to utilize those at hand. There are yet many gaps to be filled, even in so elementary a part of the study as the classification of the tribes by language. As to the detailed study of the different linguistic families, the mastery and analysis of the languages composing them, and their comparison with one another and with the languages of other families, only a beginning has been made.

After the above statement it is hardly necessary to add that the accompanying map does not purport to represent final results. On the contrary, it is to be regarded as tentative, setting forth in visible form the results of investigation up to the present time, as a guide and aid to future effort.

Each of the colors or patterns upon the map represents a distinct linguistic family, the total number of families contained in the whole area being fifty-eight. It is believed that the families of languages represented upon the map can not have sprung from a common source; they are as distinct from one another in their vocabularies and apparently in their origin as from the Aryan or the Scythian families. Unquestionably, future and more critical study will result in the fusion of some of these families. As the means for analysis and comparison accumulate, resemblances now hidden will be brought to light, and relationships hitherto unsuspected will be shown to exist. Such a result may be anticipated with the more certainty inasmuch as the present classification has been made upon a conservative plan. Where relationships between families are suspected, but can not be demonstrated by convincing evidence, it has been deemed wiser not to unite them, but to keep

them apart until more material shall have accumulated and proof of a more convincing character shall have been brought forward. While some of the families indicated on the map may in future be united to other families, and the number thus be reduced, there seems to be no ground for the belief that the total of the linguistic families of this country will be materially diminished, at least under the present methods of linguistic analysis, for there is little reason to doubt that, as the result of investigation in the field, there will be discovered tribes speaking languages not classifiable under any of the present families; thus the decrease in the total by reason of consolidation may be compensated by a corresponding increase through discovery. It may even be possible that some of the similarities used in combining languages into families may, on further study, prove to be adventitious, and the number may be increased thereby. To which side the numerical balance will fall remains for the future to decide.

As stated above, all the families occupy the same basis of dissimilarity from one another—i. e., none of them are related—and consequently no two of them are either more or less alike than any other two, except in so far as mere coincidences and borrowed material may be said to constitute likeness and relationship. Coincidences in the nature of superficial word resemblances are common in all languages of the world. No matter how widely separated geographically two families of languages may be, no matter how unlike their vocabularies, how distinct their origin, some words may always be found which appear upon superficial examination to indicate relationship. There is not a single Indian linguistic family, for instance, which does not contain words similar in sound, and more rarely similar in both sound and meaning, to words in English, Chinese, Hebrew, and other languages. Not only do such resemblances exist, but they have been discovered and pointed out, not as mere adventitious similarities, but as proof of genetic relationship. Borrowed linguistic material also appears in every family, tempting the unwary investigator into making false analogies and drawing erroneous conclusions. Neither coincidences nor borrowed material, however, can be properly regarded as evidence of cognation.

While occupying the same plane of genetic dissimilarity, the families are by no means alike as regards either the extent of territory occupied, the number of tribes grouped under them respectively, or the number of languages and dialects of which they are composed. Some of them cover wide areas, whose dimensions are stated in terms of latitude and longitude rather than by miles. Others occupy so little space that the colors representing them are hardly discernible upon the map. Some of them contain but a single tribe; others are represented by scores of tribes. In the case of a few, the term "family" is commensurate with language, since there is but one

language and no dialects. In the case of others, their tribes spoke several languages, so distinct from one another as to be for the most part mutually unintelligible, and the languages shade into many dialects more or less diverse.

The map, designed primarily for the use of students who are engaged in investigating the Indians of the United States, was at first limited to this area; subsequently its scope was extended to include the whole of North America north of Mexico. Such an extension of its plan was, indeed, almost necessary, since a number of important families, largely represented in the United States, are yet more largely represented in the territory to the north, and no adequate conception of the size and relative importance of such families as the Algonquian, Siouan, Salishan, Athapascan, and others can be had without including extralimital territory.

To the south, also, it happens that several linguistic stocks extend beyond the boundaries of the United States. Three families are, indeed, mainly extralimital in their position, viz: Yuman, the great body of the tribes of which family inhabited the peninsula of Lower California; Piman, which has only a small representation in southern Arizona; and the Coahuiltecan, which intrudes into southwestern Texas. The Athapascan family is represented in Arizona and New Mexico by the well known Apache and Navajo, the former of whom have gained a strong foothold in northern Mexico, while the Tañoan, a Pueblo family of the upper Rio Grande, has established a few pueblos lower down the river in Mexico. For the purpose of necessary comparison, therefore, the map is made to include all of North America north of Mexico, the entire peninsula of Lower California, and so much of Mexico as is necessary to show the range of families common to that country and to the United States. It is left to a future occasion to attempt to indicate the linguistic relations of Mexico and Central America, for which, it may be remarked in passing, much material has been accumulated.

It is apparent that a single map can not be made to show the locations of the several linguistic families at different epochs; nor can a single map be made to represent the migrations of the tribes composing the linguistic families. In order to make a clear presentation of the latter subject, it would be necessary to prepare a series of maps showing the areas successively occupied by the several tribes as they were disrupted and driven from section to section under the pressure of other tribes or the vastly more potent force of European encroachment. Although the data necessary for a complete representation of tribal migration, even for the period subsequent to the advent of the European, does not exist, still a very large body of material bearing upon the subject is at hand, and exceedingly valuable results in this direction could be presented did not the amount

of time and labor and the large expense attendant upon such a project forbid the attempt for the present.

The map undertakes to show the habitat of the linguistic families only, and this is for but a single period in their history, viz, at the time when the tribes composing them first became known to the European, or when they first appear on recorded history. As the dates when the different tribes became known vary, it follows as a matter of course that the periods represented by the colors in one portion of the map are not synchronous with those in other portions. Thus the data for the Columbia River tribes is derived chiefly from the account of the journey of Lewis and Clarke in 1803–'05, long before which period radical changes of location had taken place among the tribes of the eastern United States. Again, not only are the periods represented by the different sections of the map not synchronous, but only in the case of a few of the linguistic families, and these usually the smaller ones, is it possible to make the coloring synchronous for different sections of the same family. Thus our data for the location of some of the northern members of the Shoshonean family goes back to 1804, a date at which absolutely no knowledge had been gained of most of the southern members of the group, our first accounts of whom began about 1850. Again, our knowledge of the eastern Algonquian tribes dates back to about 1600, while no information was had concerning the Atsina, Blackfeet, Cheyenne, and the Arapaho, the westernmost members of the family, until two centuries later.

Notwithstanding these facts, an attempt to fix upon the areas formerly occupied by the several linguistic families, and of the pristine homes of many of the tribes composing them, is by no means hopeless. For instance, concerning the position of the western tribes during the period of early contact of our colonies and its agreement with their position later when they appear in history, it may be inferred that as a rule it was stationary, though positive evidence is lacking. When changes of tribal habitat actually took place they were rarely in the nature of extensive migration, by which a portion of a linguistic family was severed from the main body, but usually in the form of encroachment by a tribe or tribes upon neighboring territory, which resulted simply in the extension of the limits of one linguistic family at the expense of another, the defeated tribes being incorporated or confined within narrower limits. If the above inference be correct, the fact that different chronologic periods are represented upon the map is of comparatively little importance, since, if the Indian tribes were in the main sedentary, and not nomadic, the changes resulting in the course of one or two centuries would not make material differences. Exactly the opposite opinion, however, has been expressed by many writers, viz, that the North

American Indian tribes were nomadic. The picture presented by these writers is of a medley of ever-shifting tribes, to-day here, to-morrow there, occupying new territory and founding new homes—if nomads can be said to have homes—only to abandon them. Such a picture, however, is believed to convey an erroneous idea of the former condition of our Indian tribes. As the question has significance in the present connection it must be considered somewhat at length.

INDIAN TRIBES SEDENTARY.

In the first place, the linguistic map, based as it is upon the earliest evidence obtainable, itself offers conclusive proof, not only that the Indian tribes were in the main sedentary at the time history first records their position, but that they had been sedentary for a very long period. In order that this may be made plain, it should be clearly understood, as stated above, that each of the colors or patterns upon the map indicates a distinct linguistic family. It will be noticed that the colors representing the several families are usually in single bodies, i. e., that they represent continuous areas, and that with some exceptions the same color is not scattered here and there over the map in small spots. Yet precisely this last state of things is what would be expected had the tribes representing the families been nomadic to a marked degree. If nomadic tribes occupied North America, instead of spreading out each from a common center, as the colors show that the tribes composing the several families actually did, they would have been dispersed here and there over the whole face of the country. That they are not so dispersed is considered proof that in the main they were sedentary. It has been stated above that more or less extensive migrations of some tribes over the country had taken place prior to European occupancy. This fact is disclosed by a glance at the present map. The great Athapascan family, for instance, occupying the larger part of British America, is known from linguistic evidence to have sent off colonies into Oregon (Wilopah, Tlatskanai, Coquille), California (Smith River tribes, Kenesti or Wailakki tribes, Hupa), and Arizona and New Mexico (Apache, Navajo). How long before European occupancy of this country these migrations took place can not be told, but in the case of most of them it was undoubtedly many years. By the test of language it is seen that the great Siouan family, which we have come to look upon as almost exclusively western, had one offshoot in Virginia (Tutelo), another in North and South Carolina (Catawba), and a third in Mississippi (Biloxi); and the Algonquian family, so important in the early history of this country, while occupying a nearly continuous area in the north and east, had yet secured a foothold, doubtless in very recent times, in Wyoming and Colorado. These and other

similar facts sufficiently prove the power of individual tribes or gentes to sunder relations with the great body of their kindred and to remove to distant homes. Tested by linguistic evidence, such instances appear to be exceptional, and the fact remains that in the great majority of cases the tribes composing linguistic families occupy continuous areas, and hence are and have been practically sedentary. Nor is the bond of a common language, strong and enduring as that bond is usually thought to be, entirely sufficient to explain the phenomenon here pointed out. When small in number the linguistic tie would undoubtedly aid in binding together the members of a tribe; but as the people speaking a common language increase in number and come to have conflicting interests, the linguistic tie has often proved to be an insufficient bond of union. In the case of our Indian tribes feuds and internecine conflicts were common between members of the same linguistic family. In fact, it is probable that a very large number of the dialects into which Indian languages are split originated as the result of internecine strife. Factions, divided and separated from the parent body, by contact, intermarriage, and incorporation with foreign tribes, developed distinct dialects or languages.

But linguistic evidence alone need not be relied upon to prove that the North American Indian was not nomadic.

Corroborative proof of the sedentary character of our Indian tribes is to be found in the curious form of kinship system, with motherrite as its chief factor, which prevails. This, as has been pointed out in another place, is not adapted to the necessities of nomadic tribes, which need to be governed by a patriarchal system, and, as well, to be possessed of flocks and herds.

There is also an abundance of historical evidence to show that, when first discovered by Europeans, the Indians of the eastern United States were found living in fixed habitations. This does not necessarily imply that the entire year was spent in one place. Agriculture not being practiced to an extent sufficient to supply the Indian with full subsistence, he was compelled to make occasional changes from his permanent home to the more or less distant waters and forests to procure supplies of food. When furnished with food and skins for clothing, the hunting parties returned to the village which constituted their true home. At longer periods, for several reasons—among which probably the chief were the hostility of stronger tribes, the failure of the fuel supply near the village, and the compulsion exercised by the ever lively superstitious fancies of the Indians—the villages were abandoned and new ones formed to constitute new homes, new focal points from which to set out on their annual hunts and to which to return when these were completed. The tribes of the eastern United States had fixed and definitely bounded habitats, and their wanderings were in the nature of temporary excursions to

established points resorted to from time immemorial. As, however, they had not yet entered completely into the agricultural condition, to which they were fast progressing from the hunter state, they may be said to have been nomadic to a very limited extent. The method of life thus sketched was substantially the one which the Indians were found practicing throughout the eastern part of the United States, as also, though to a less degree, in the Pacific States. Upon the Pacific coast proper the tribes were even more sedentary than upon the Atlantic, as the mild climate and the great abundance and permanent supply of fish and shellfish left no cause for a seasonal change of abode.

When, however, the interior portions of the country were first visited by Europeans, a different state of affairs was found to prevail. There the acquisition of the horse and the possession of firearms had wrought very great changes in aboriginal habits. The acquisition of the former enabled the Indian of the treeless plains to travel distances with ease and celerity which before were practically impossible, and the possession of firearms stimulated tribal aggressiveness to the utmost pitch. Firearms were everywhere doubly effective in producing changes in tribal habitats, since the somewhat gradual introduction of trade placed these deadly weapons in the hands of some tribes, and of whole congeries of tribes, long before others could obtain them. Thus the general state of tribal equilibrium which had before prevailed was rudely disturbed. Tribal warfare, which hitherto had been attended with inconsiderable loss of life and slight territorial changes, was now made terribly destructive, and the territorial possessions of whole groups of tribes were augmented at the expense of those less fortunate. The horse made wanderers of many tribes which there is sufficient evidence to show were formerly nearly sedentary. Firearms enforced migration and caused wholesale changes in the habitats of tribes, which, in the natural order of events, it would have taken many centuries to produce. The changes resulting from these combined agencies, great as they were, are, however, slight in comparison with the tremendous effects of the wholesale occupancy of Indian territory by Europeans. As the acquisition of territory by the settlers went on, a wave of migration from east to west was inaugurated which affected tribes far remote from the point of disturbance, ever forcing them within narrower and narrower bounds, and, as time went on, producing greater and greater changes throughout the entire country.

So much of the radical change in tribal habitats as took place in the area remote from European settlements, mainly west of the Mississippi, is chiefly unrecorded, save imperfectly in Indian tradition, and is chiefly to be inferred from linguistic evidence and from the few facts in our possession. As, however, the most important of these changes occurred after, and as a result of, European

occupancy, they are noted in history, and thus the map really gives a better idea of the pristine or prehistoric habitat of the tribes than at first might be thought possible.

Before speaking of the method of establishing the boundary lines between the linguistic families, as they appear upon the map, the nature of the Indian claim to land and the manner and extent of its occupation should be clearly set forth.

POPULATION.

As the question of the Indian population of the country has a direct bearing upon the extent to which the land was actually occupied, a few words on the subject will be introduced here, particularly as the area included in the linguistic map is so covered with color that it may convey a false impression of the density of the Indian population. As a result of an investigation of the subject of the early Indian population, Col. Mallery long ago arrived at the conclusion that their settlements were not numerous, and that the population, as compared with the enormous territory occupied, was extremely small.[1]

Careful examination since the publication of the above tends to corroborate the soundness of the conclusions there first formulated. The subject may be set forth as follows:

The sea shore, the borders of lakes, and the banks of rivers, where fish and shell-fish were to be obtained in large quantities, were naturally the Indians' chief resort, and at or near such places were to be found their permanent settlements. As the settlements and lines of travel of the early colonists were along the shore, the lakes and the rivers, early estimates of the Indian population were chiefly based upon the numbers congregated along these highways, it being generally assumed that away from the routes of travel a like population existed. Again, over-estimates of population resulted from the fact that the same body of Indians visited different points during the year, and not infrequently were counted two or three times; change of permanent village sites also tended to augment estimates of population.

For these and other reasons a greatly exaggerated idea of the Indian population was obtained, and the impressions so derived have been dissipated only in comparatively recent times.

As will be stated more fully later, the Indian was dependent to no small degree upon natural products for his food supply. Could it be affirmed that the North American Indians had increased to a point where they pressed upon the food supply, it would imply a very much larger population than we are justified in assuming from other considerations. But for various reasons the Malthusian law,

[1] Proc. Am. Ass. Adv. Science, 1877, vol. 26.

whether applicable elsewhere or not, can not be applied to the Indians of this country. Everywhere bountiful nature had provided an unfailing and practically inexhaustible food supply. The rivers teemed with fish and mollusks, and the forests with game, while upon all sides was an abundance of nutritious roots and seeds. All of these sources were known, and to a large extent they were drawn upon by the Indian, but the practical lesson of providing in the season of plenty for the season of scarcity had been but imperfectly learned, or, when learned, was but partially applied. Even when taught by dire experience the necessity of laying up adequate stores, it was the almost universal practice to waste great quantities of food by a constant succession of feasts, in the superstitious observances of which the stores were rapidly wasted and plenty soon gave way to scarcity and even to famine.

Curiously enough, the hospitality which is so marked a trait among our North American Indians had its source in a law, the invariable practice of which has had a marked effect in retarding the acquisition by the Indian of the virtue of providence. As is well known, the basis of the Indian social organization was the kinship system. By its provisions almost all property was possessed in common by the gens or clan. Food, the most important of all, was by no means left to be exclusively enjoyed by the individual or the family obtaining it.

For instance, the distribution of game among the families of a party was variously provided for in different tribes, but the practical effect of the several customs relating thereto was the sharing of the supply. The hungry Indian had but to ask to receive and this no matter how small the supply, or how dark the future prospect. It was not only his privilege to ask, it was his *right to demand.* Undoubtedly what was originally a right, conferred by kinship connections, ultimately assumed broader proportions, and finally passed into the exercise of an almost indiscriminate hospitality. By reason of this custom, the poor hunter was virtually placed upon equality with the expert one, the lazy with the industrious, the improvident with the more provident. Stories of Indian life abound with instances of individual families or parties being called upon by those less fortunate or provident to share their supplies.

The effect of such a system, admirable as it was in many particulars, practically placed a premium upon idleness. Under such communal rights and privileges a potent spur to industry and thrift is wanting.

There is an obverse side to this problem, which a long and intimate acquaintance with the Indians in their villages has forced upon the writer. The communal ownership of food and the great hospitality practiced by the Indian have had a very much greater influence upon his character than that indicated in the foregoing

remarks. The peculiar institutions prevailing in this respect gave to each tribe or clan a profound interest in the skill, ability and industry of each member. He was the most valuable person in the community who supplied it with the most of its necessities. For this reason the successful hunter or fisherman was always held in high honor, and the woman who gathered great store of seeds, fruits, or roots, or who cultivated a good corn-field, was one who commanded the respect and received the highest approbation of the people. The simple and rude ethics of a tribal people are very important to them, the more so because of their communal institutions; and everywhere throughout the tribes of the United States it is discovered that their rules of conduct were deeply implanted in the minds of the people. An organized system of teaching is always found, as it is the duty of certain officers of the clan to instruct the young in all the industries necessary to their rude life, and simple maxims of industry abound among the tribes and are enforced in diverse and interesting ways. The power of the elder men in the clan over its young members is always very great, and the training of the youth is constant and rigid. Besides this, a moral sentiment exists in favor of primitive virtues which is very effective in molding character. This may be illustrated in two ways.

Marriage among all Indian tribes is primarily by legal appointment, as the young woman receives a husband from some other prescribed clan or clans, and the elders of the clan, with certain exceptions, control these marriages, and personal choice has little to do with the affair. When marriages are proposed, the virtues and industry of the candidates, and more than all, their ability to properly live as married couples and to supply the clan or tribe with a due amount of subsistence, are discussed long and earnestly, and the young man or maiden who fails in this respect may fail in securing an eligible and desirable match. And these motives are constantly presented to the savage youth.

A simple democracy exists among these people, and they have a variety of tribal offices to fill. In this way the men of the tribe are graded, and they pass from grade to grade by a selection practically made by the people. And this leads to a constant discussion of the virtues and abilities of all the male members of the clan, from boyhood to old age. He is most successful in obtaining clan and tribal promotion who is most useful to the clan and the tribe. In this manner all of the ambitious are stimulated, and this incentive to industry is very great.

When brought into close contact with the Indian, and into intimate acquaintance with his language, customs, and religious ideas, there is a curious tendency observable in students to overlook aboriginal vices and to exaggerate aboriginal virtues. It seems to

be forgotten that after all the Indian is a savage, with the characteristics of a savage, and he is exalted even above the civilized man. The tendency is exactly the reverse of what it is in the case of those who view the Indian at a distance and with no precise knowledge of any of his characteristics. In the estimation of such persons the Indian's vices greatly outweigh his virtues; his language is a gibberish, his methods of war cowardly, his ideas of religion utterly puerile.

The above tendencies are accentuated in the attempt to estimate the comparative worth and position of individual tribes. No being is more patriotic than the Indian. He believes himself to be the result of a special creation by a partial deity and holds that his is the one favored race. The name by which the tribes distinguish themselves from other tribes indicates the further conviction that, as the Indian is above all created things, so in like manner each particular tribe is exalted above all others. "Men of men" is the literal translation of one name; "the only men" of another, and so on through the whole category. A long residence with any one tribe frequently inoculates the student with the same patriotic spirit. Bringing to his study of a particular tribe an inadequate conception of Indian attainments and a low impression of their moral and intellectual plane, the constant recital of its virtues, the bravery and prowess of its men in war, their generosity, the chaste conduct and obedience of its women as contrasted with the opposite qualities of all other tribes, speedily tends to partisanship. He discovers many virtues and finds that the moral and intellectual attainments are higher than he supposed; but these advantages he imagines to be possessed solely, or at least to an unusual degree, by the tribe in question. Other tribes are assigned much lower rank in the scale.

The above is peculiarly true of the student of language. He who studies only one Indian language and learns its manifold curious grammatic devices, its wealth of words, its capacity of expression, is speedily convinced of its superiority to all other Indian tongues, and not infrequently to all languages by whomsoever spoken.

If like admirable characteristics are asserted for other tongues he is apt to view them but as derivatives from one original. Thus he is led to overlook the great truth that the mind of man is everywhere practically the same, and that the innumerable differences of its products are indices merely of different stages of growth or are the results of different conditions of environment. In its development the human mind is limited by no boundaries of tribe or race.

Again, a long acquaintance with many tribes in their homes leads to the belief that savage people do not lack industry so much as wisdom. They are capable of performing, and often do perform, great and continuous labor. The men and women alike toil from day to day and from year to year, engaged in those tasks that are

presented with the recurring seasons. In civilization, hunting and fishing are often considered sports, but in savagery they are labors, and call for endurance, patience, and sagacity. And these are exercised to a reasonable degree among all savage peoples.

It is probable that the real difficulty of purchasing quantities of food from Indians has, in most cases, not been properly understood. Unless the alien is present at a time of great abundance, when there is more on hand or easily obtainable than sufficient to supply the wants of the people, food can not be bought of the Indians. This arises from the fact that the tribal tenure is communal, and to get food by purchase requires a treaty at which all the leading members of the tribe are present and give consent.

As an illustration of the improvidence of the Indians generally, the habits of the tribes along the Columbia River may be cited. The Columbia River has often been pointed to as the probable source of a great part of the Indian population of this country, because of the enormous supply of salmon furnished by it and its tributaries. If an abundant and readily obtained supply of food was all that was necessary to insure a large population, and if population always increased up to the limit of food supply, unquestionably the theory of repeated migratory waves of surplus population from the Columbia Valley would be plausible enough. It is only necessary, however, to turn to the accounts of the earlier explorers of this region, Lewis and Clarke, for example, to refute the idea, so far at least as the Columbia Valley is concerned, although a study of the many diverse languages spread over the United States would seem sufficiently to prove that the tribes speaking them could not have originated at a common center, unless, indeed, at a period anterior to the formation of organized language.

The Indians inhabiting the Columbia Valley were divided into many tribes, belonging to several distinct linguistic families. They all were in the same culture status, however, and differed in habits and arts only in minor particulars. All of them had recourse to the salmon of the Columbia for the main part of their subsistence, and all practiced similar crude methods of curing fish and storing it away for the winter. Without exception, judging from the accounts of the above mentioned and of more recent authors, all the tribes suffered periodically more or less from insufficient food supply, although, with the exercise of due forethought and economy, even with their rude methods of catching and curing salmon, enough might here have been cured annually to suffice for the wants of the Indian population of the entire Northwest for several years.

In their ascent of the river in spring, before the salmon run, it was only with great difficulty that Lewis and Clarke were able to provide themselves by purchase with enough food to keep themselves from starving. Several parties of Indians from the vicinity of the

Dalles, the best fishing station on the river, were met on their way down in quest of food, their supply of dried salmon having been entirely exhausted.

Nor is there anything in the accounts of any of the early visitors to the Columbia Valley to authorize the belief that the population there was a very large one. As was the case with all fish-stocked streams, the Columbia was resorted to in the fishing season by many tribes living at considerable distance from it; but there is no evidence tending to show that the settled population of its banks or of any part of its drainage basin was or ever had been by any means excessive.

The Dalles, as stated above, was the best fishing station on the river, and the settled population there may be taken as a fair index of that of other favorable locations. The Dalles was visited by Ross in July, 1811, and the following is his statement in regard to the population:

> The main camp of the Indians is situated at the head of the narrows, and may contain, during the salmon season, 3,000 souls, or more; but the constant inhabitants of the place do not exceed 100 persons, and are called Wy-am-pams; the rest are all foreigners from different tribes throughout the country, who resort hither, not for the purpose of catching salmon, but chiefly for gambling and speculation.[1]

And as it was on the Columbia with its enormous supply of fish, so was it elsewhere in the United States.

Even the practice of agriculture, with its result of providing a more certain and bountiful food supply, seems not to have had the effect of materially augmenting the Indian population. At all events, it is in California and Oregon, a region where agriculture was scarcely practiced at all, that the most dense aboriginal population lived. There is no reason to believe that there ever existed within the limits of the region included in the map, with the possible exception of certain areas in California, a population equal to the natural food supply. On the contrary, there is every reason for believing that the population at the time of the discovery might have been many times more than what it actually was had a wise economy been practised.

The effect of wars in decimating the people has often been greatly exaggerated. Since the advent of the white man on the continent, wars have prevailed to a degree far beyond that existing at an earlier time. From the contest which necessarily arose between the native tribes and invading nations many wars resulted, and their history is well known. Again, tribes driven from their ancestral homes often retreated to lands previously occupied by other tribes, and intertribal wars resulted therefrom. The acquisition of firearms and horses, through the agency of white men, also had its influence, and when a commercial value was given to furs and skins, the Indian aban-

[1] Adventures on the Columbia River, 1849, p. 117.

doned agriculture to pursue hunting and traffic, and sought new fields for such enterprises, and many new contests arose from this cause. Altogether the character of the Indian since the discovery of Columbus has been greatly changed, and he has become far more warlike and predatory. Prior to that time, and far away in the wilderness beyond such influence since that time, Indian tribes seem to have lived together in comparative peace and to have settled their difficulties by treaty methods. A few of the tribes had distinct organizations for purposes of war; all recognized it to a greater or less extent in their tribal organization; but from such study as has been given the subject, and from the many facts collected from time to time relating to the intercourse existing between tribes, it appears that the Indians lived in comparative peace. Their accumulations were not so great as to be tempting, and their modes of warfare were not excessively destructive. Armed with clubs and spears and bows and arrows, war could be prosecuted only by hand-to-hand conflict, and depended largely upon individual prowess, while battle for plunder, tribute, and conquest was almost unknown. Such inter-tribal wars as occurred originated from other causes, such as infraction of rights relating to hunting grounds and fisheries, and still oftener prejudices growing out of their superstitions.

That which kept the Indian population down sprang from another source, which has sometimes been neglected. The Indians had no reasonable or efficacious system of medicine. They believed that diseases were caused by unseen evil beings and by witchcraft, and every cough, every toothache, every headache, every chill, every fever, every boil, and every wound, in fact, all their ailments, were attributed to such cause. Their so-called medicine practice was a horrible system of sorcery, and to such superstition human life was sacrificed on an enormous scale. The sufferers were given over to priest doctors to be tormented, bedeviled, and destroyed; and a universal and profound belief in witchcraft made them suspicious, and led to the killing of all suspected and obnoxious people, and engendered blood feuds on a gigantic scale. It may be safely said that while famine, pestilence, disease, and war may have killed many, superstition killed more; in fact, a natural death in a savage tent is a comparatively rare phenomenon; but death by sorcery, medicine, and blood feud arising from a belief in witchcraft is exceedingly common.

Scanty as was the population compared with the vast area teeming with natural products capable of supporting human life, it may be safely said that at the time of the discovery, and long prior thereto, practically the whole of the area included in the present map was claimed and to some extent occupied by Indian tribes; but the possession of land by the Indian by no means implies occupancy in the modern or civilized sense of the term. In the latter sense occupation means to a great extent individual control and

ownership. Very different was it with the Indians. Individual ownership of land was, as a rule, a thing entirely foreign to the Indian mind, and quite unknown in the culture stage to which he belonged. All land, of whatever character or however utilized, was held in common by the tribe, or in a few instances by the clan. Apparently an exception to this broad statement is to be made in the case of the Haida of the northwest coast, who have been studied by Dawson. According to him[1] the land is divided among the different families and is held as strictly personal property, with hereditary rights or possessions descending from one generation to another. "The lands may be bartered or given away. The larger salmon streams are, however, often the property jointly of a number of families." The tendency in this case is toward personal right in land.

TRIBAL LAND.

For convenience of discussion, Indian tribal land may be divided into three classes: First, the land occupied by the villages; second, the land actually employed in agriculture; third, the land claimed by the tribe but not occupied, except as a hunting ground.

Village sites.—The amount of land taken up as village sites varied considerably in different parts of the country. It varied also in the same tribe at different times. As a rule, the North American Indians lived in communal houses of sufficient size to accommodate several families. In such cases the village consisted of a few large structures closely grouped together, so that it covered very little ground. When territory was occupied by warlike tribes, the construction of rude palisades around the villages and the necessities of defense generally tended to compel the grouping of houses, and the permanent village sites of even the more populous tribes covered only a very small area. In the case of confederated tribes and in the time of peace the tendency was for one or more families to establish more or less permanent settlements away from the main village, where a livelihood was more readily obtainable. Hence, in territory which had enjoyed a considerable interval of peace the settlements were in the nature of small agricultural communities, established at short distances from each other and extending in the aggregate over a considerable extent of country. In the case of populous tribes the villages were probably of the character of the Choctaw towns described by Adair.[2] "The barrier towns, which are next to the Muskohge and Chikkasah countries, are compactly settled for social defense, according to the general method of other savage nations; but the rest, both in the center and toward the Mississippi, are only scattered plantations, as best suits a separate easy

[1] Report on the Queen Charlotte Islands, 1878, p. 117.
[2] Hist. of Am. Ind., 1775, p. 282.

way of living. A stranger might be in the middle of one of their populous, extensive towns without seeing half a dozen houses in the direct course of his path." More closely grouped settlements are described by Wayne in American State Papers, 1793, in his account of an expedition down the Maumee Valley, where he states that "The margins of the Miamis of the Lake and the Au Glaize appear like one continuous village for a number of miles, nor have I ever beheld such immense fields of corn in any part of America from Canada to Florida." Such a chain of villages as this was probably highly exceptional; but even under such circumstances the village sites proper formed but a very small part of the total area occupied.

From the foregoing considerations it will be seen that the amount of land occupied as village sites under any circumstances was inconsiderable.

Agricultural land.—It is practically impossible to make an accurate estimate of the relative amount of land devoted to agricultural purposes by any one tribe or by any family of tribes. None of the factors which enter into the problem are known to us with sufficient accuracy to enable reliable estimates to be made of the amount of land tilled or of the products derived from the tillage; and only in few cases have we trustworthy estimates of the population of the tribe or tribes practicing agriculture. Only a rough approximation of the truth can be reached from the scanty data available and from a general knowledge of Indian methods of subsistence.

The practice of agriculture was chiefly limited to the region south of the St. Lawrence and east of the Mississippi. In this region it was far more general and its results were far more important than is commonly supposed. To the west of the Mississippi only comparatively small areas were occupied by agricultural tribes and these lay chiefly in New Mexico and Arizona and along the Arkansas, Platte, and Missouri Rivers. The rest of that region was tenanted by non-agricultural tribes—unless indeed the slight attention paid to the cultivation of tobacco by a few of the west coast tribes, notably the Haida, may be considered agriculture. Within the first mentioned area most of the tribes, perhaps all, practiced agriculture to a greater or less extent, though unquestionably the degree of reliance placed upon it as a means of support differed much with different tribes and localities.

Among many tribes agriculture was relied upon to supply an important—and perhaps in the case of a few tribes, the most important—part of the food supply. The accounts of some of the early explorers in the southern United States, where probably agriculture was more systematized than elsewhere, mention corn fields of great extent, and later knowledge of some northern tribes, as the Iroquois and some of the Ohio Valley tribes, shows that they also raised corn in great quantities.

The practice of agriculture to a point where it shall prove the main and constant supply of a people, however, implies a degree of sedentariness to which our Indians as a rule had not attained and an amount of steady labor without immediate return which was peculiarly irksome to them. Moreover, the imperfect methods pursued in clearing, planting, and cultivating sufficiently prove that the Indians, though agriculturists, were in the early stages of development as such—a fact also attested by the imperfect and one-sided division of labor between the sexes, the men as a rule taking but small share of the burdensome tasks of clearing land, planting, and harvesting.

It is certain that by no tribe of the United States was agriculture pursued to such an extent as to free its members from the practice of the hunter's or fisher's art. Admitting the most that can be claimed for the Indian as an agriculturist, it may be stated that, whether because of the small population or because of the crude manner in which his operations were carried on, the amount of land devoted to agriculture within the area in question was infinitesimally small as compared with the total. Upon a map colored to show only the village sites and agricultural land, the colors would appear in small spots, while by far the greater part of the map would remain uncolored.

Hunting claims.—The great body of the land within the area mapped which was occupied by agricultural tribes, and all the land outside it, was held as a common hunting ground, and the tribal claim to territory, independent of village sites and corn fields, amounted practically to little else than hunting claims. The community of possession in the tribe to the hunting ground was established and practically enforced by hunting laws, which dealt with the divisions of game among the village, or among the families of the hunters actually taking part in any particular hunt. As a rule, such natural landmarks as rivers, lakes, hills, and mountain chains served to mark with sufficient accuracy the territorial tribal limits. In California, and among the Haida and perhaps other tribes of the northwest coast, the value of certain hunting and fishing claims led to their definition by artificial boundaries, as by sticks or stones.[1]

Such precautions imply a large population, and in such regions as California the killing of game upon the land of adjoining tribes was rigidly prohibited and sternly punished.

As stated above, every part of the vast area included in the present map is to be regarded as belonging, according to Indian ideas of land title, to one or another of the Indian tribes. To determine the several tribal possessions and to indicate the proper boundary lines between individual tribes and linguistic families is a work of great

[1] Powers, Cont. N. A. Eth. 1877, vol. 3, p. 109: Dawson, Queen Charlotte Islands, 1880, p. 117.

difficulty. This is due more to the imperfection and scantiness of available data concerning tribal claims than to the absence of claimants or to any ambiguity in the minds of the Indians as to the boundaries of their several possessions.

Not only is precise data wanting respecting the limits of land actually held or claimed by many tribes, but there are other tribes, which disappeared early in the history of our country, the boundaries to whose habitat is to be determined only in the most general way. Concerning some of these, our information is so vague that the very linguistic family they belonged to is in doubt. In the case of probably no one family are the data sufficient in amount and accuracy to determine positively the exact areas definitely claimed or actually held by the tribes. Even in respect of the territory of many of the tribes of the eastern United States, much of whose land was ceded by actual treaty with the Government, doubt exists. The fixation of the boundary points, when these are specifically mentioned in the treaty, as was the rule, is often extremely difficult, owing to the frequent changes of geographic names and the consequent disagreement of present with ancient maps. Moreover, when the Indian's claim to his land had been admitted by Government, and the latter sought to acquire a title through voluntary cession by actual purchase, land assumed a value to the Indian never attaching to it before.

Under these circumstances, either under plea of immemorial occupancy or of possession by right of conquest, the land was often claimed, and the claims urged with more or less plausibility by several tribes, sometimes of the same linguistic family, sometimes of different families.

It was often found by the Government to be utterly impracticable to decide between conflicting claims, and not infrequently the only way out of the difficulty lay in admitting the claim of both parties, and in paying for the land twice or thrice. It was customary for a number of different tribes to take part in such treaties, and not infrequently several linguistic families were represented. It was the rule for each tribe, through its representatives, to cede its share of a certain territory, the natural boundaries of which as a whole are usually recorded with sufficient accuracy. The main purpose of the Government in treaty-making being to obtain possession of the land, comparatively little attention was bestowed to defining the exact areas occupied by the several tribes taking part in a treaty, except in so far as the matter was pressed upon attention by disputing claimants. Hence the territory claimed by each tribe taking part in the treaty is rarely described, and occasionally not all the tribes interested in the proposed cession are even mentioned categorically. The latter statement applies more particularly to the territory west of the Mississippi, the data for determining ownership

to which is much less precise, and the doubt and confusion respecting tribal boundary lines correspondingly greater than in the country east of that river. Under the above circumstances, it will be readily understood that to determine tribal boundaries within accurately drawn lines is in the vast majority of cases quite impossible.

Imperfect and defective as the terms of the treaties frequently are as regards the definition of tribal boundaries, they are by far the most accurate and important of the means at our command for fixing boundary lines upon the present map. By their aid the territorial possessions of a considerable number of tribes have been determined with desirable precision, and such areas definitely established have served as checks upon the boundaries of other tribes, concerning the location and extent of whose possessions little is known.

For establishing the boundaries of such tribes as are not mentioned in treaties, and of those whose territorial possessions are not given with sufficient minuteness, early historical accounts are all important. Such accounts, of course, rarely indicate the territorial possessions of the tribes with great precision. In many cases, however, the sites of villages are accurately given. In others the source of information concerning a tribe is contained in a general statement of the occupancy of certain valleys or mountain ranges or areas at the heads of certain rivers, no limiting lines whatever being assigned. In others, still, the notice of a tribe is limited to a brief mention of the presence in a certain locality of hunting or war parties.

Data of this loose character would of course be worthless in an attempt to fix boundary lines in accordance with the ideas of the modern surveyor. The relative positions of the families and the relative size of the areas occupied by them, however, and not their exact boundaries, are the chief concern in a linguistic map, and for the purpose of establishing these, and, in a rough way, the boundaries of the territory held by the tribes composing them, these data are very important, and when compared with one another and corrected by more definite data, when such are at hand, they have usually been found to be sufficient for the purpose.

SUMMARY OF DEDUCTIONS.

In conclusion, the more important deductions derivable from the data upon which the linguistic map is based, or that are suggested by it, may be summarized as follows:

First, the North American Indian tribes, instead of speaking related dialects, originating in a single parent language, in reality speak many languages belonging to distinct families, which have no apparent unity of origin.

Second, the Indian population of North America was greatly exaggerated by early writers, and instead of being large was in reality small as compared with the vast territory occupied and the

abundant food supply; and furthermore, the population had nowhere augmented sufficiently, except possibly in California, to press upon the food supply.

Third, although representing a small population, the numerous tribes had overspread North America and had possessed themselves of all the territory, which, in the case of a great majority of tribes, was owned in common by the tribe.

Fourth, prior to the advent of the European, the tribes were probably nearly in a state of equilibrium, and were in the main sedentary, and those tribes which can be said with propriety to have been nomadic became so only after the advent of the European, and largely as the direct result of the acquisition of the horse and the introduction of firearms.

Fifth, while agriculture was general among the tribes of the eastern United States, and while it was spreading among western tribes, its products were nowhere sufficient wholly to emancipate the Indian from the hunter state.

LINGUISTIC FAMILIES.

Within the area covered by the map there are recognized fifty-eight distinct linguistic families.

These are enumerated in alphabetical order and each is accompanied by a table of the synonyms of the family name, together with a brief statement of the geographical area occupied by each family, so far as it is known. A list of the principal tribes of each family also is given.

ADAIZAN FAMILY.

=Adaize, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 306, 1836. Latham in Proc. Philolog. Soc., Lond., II, 31–59, 1846. Latham, Opuscula, 293, 1860. Gallatin in Trans. Am. Eth. Soc., II, xcix, 1848. Gallatin in Schoolcraft Ind. Tribes, III, 402, 1853. Latham, Elements Comp. Phil., 477, 1862 (referred to as one of the most isolated languages of N. A.). Keane, App. to Stanford's Comp. (Cent. and So. Am.), 478, 1878 (or Adees).

=Adaizi, Prichard, Phys. Hist. Mankind, V, 406, 1847.

=Adaise, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848.

=Adahi, Latham, Nat. Hist. Man, 342, 1850. Latham in Trans. Philolog. Soc., Lond., 103, 1856. Latham, Opuscula, 366, 368, 1860. Latham, Elements Comp., Phil., 473, 477, 1862 (same as his Adaize above).

=Adaes, Buschmann, Spuren der aztekischen Sprache, 424, 1859.

=Adees, Keane, App. to Stanford's Comp. (Cent. and So. Am.) 478, 1878 (same as his Adaize).

=Adái, Gatschet, Creek Mig. Leg., 41, 1884.

Derivation: From a Caddo word hadai, sig. "brush wood."

This family was based upon the language spoken by a single tribe who, according to Dr. Sibley, lived about the year 1800 near the old

Spanish fort or mission of Adaize, "about 40 miles from Natchitoches, below the Yattassees, on a lake called Lac Macdon, which communicates with the division of Red River that passes by Bayau Pierre."[1] A vocabulary of about two hundred and fifty words is all that remains to us of their language, which according to the collector, Dr. Sibley, "differs from all others, and is so difficult to speak or understand that no nation can speak ten words of it."

It was from an examination of Sibley's vocabulary that Gallatin reached the conclusion of the distinctness of this language from any other known, an opinion accepted by most later authorities. A recent comparison of this vocabulary by Mr. Gatschet, with several Caddoan dialects, has led to the discovery that a considerable percentage of the Adái words have a more or less remote affinity with Caddoan, and he regards it as a Caddoan dialect. The amount of material, however, necessary to establish its relationship to Caddoan is not at present forthcoming, and it may be doubted if it ever will be, as recent inquiry has failed to reveal the existence of a single member of the tribe, or of any individual of the tribes once surrounding the Adái who remembers a word of the language.

Mr. Gatschet found that some of the older Caddo in the Indian Territory remembered the Adái as one of the tribes formerly belonging to the Caddo Confederacy. More than this he was unable to learn from them.

Owing to their small numbers, their remoteness from lines of travel, and their unwarlike character the Adái have cut but a small figure in history, and accordingly the known facts regarding them are very meager. The first historical mention of them appears to be by Cabeça de Vaca, who in his "Naufragios," referring to his stay in Texas, about 1530, calls them Atayos. Mention is also made of them by several of the early French explorers of the Mississippi, as d'Iberville and Joutel.

The Mission of Adayes, so called from its proximity to the home of the tribe, was established in 1715. In 1792 there was a partial emigration of the Adái to the number of fourteen families to a site south of San Antonio de Bejar, southwest Texas, where apparently they amalgamated with the surrounding Indian population and were lost sight of. (From documents preserved at the City Hall, San Antonio, and examined by Mr. Gatschet in December, 1886.) The Adái who were left in their old homes numbered one hundred in 1802, according to Baudry de Lozieres. According to Sibley, in 1809 there were only "twenty men of them remaining, but more women." In 1820 Morse mentions only thirty survivors.

[1] Travels of Lewis and Clarke, London, 1809, p. 189.

ALGONQUIAN FAMILY.

>Algonkin-Lenape, Gallatin in Trans. Am. Antiq. Soc., II, 23, 305, 1836. Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid, 1852.

>Algonquin, Bancroft, Hist. U. S., III, 237, 1840. Prichard Phys. Hist. Mankind, V, 381, 1847 (follows Gallatin).

>Algonkins, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Gallatin in Schoolcraft Ind. Tribes, III, 401, 1853.

>Algonkin, Turner in Pac. R. R. Rept., III, pt. 3, 55, 1856 (gives Delaware and Shawnee vocabs.). Hayden, Cont. Eth. and Phil. Missouri Inds., 232, 1862 (treats only of Crees, Blackfeet, Shyennes). Hale in Am. Antiq., 112, April, 1883 (treated with reference to migration).

<Algonkin, Latham in Trans. Philolog. Soc., Lond., 1856 (adds to Gallatin's list of 1836 the Bethuck, Shyenne, Blackfoot, and Arrapaho). Latham, Opuscula, 327, 1860 (as in preceding). Latham, Elements Comp. Phil., 447, 1862.

<Algonquin, Keane, App. Stanford's Comp., (Cent. and S. Am.), 460, 465, 1878 (list includes the Maquas, an Iroquois tribe).

>Saskatschawiner, Berghaus, Physik. Atlas, map 17, 1848 (probably designates the Arapaho).

>Arapahoes, Berghaus, Physik. Atlas, map 17, 1852.

×Algonkin und Beothuk, Berghaus, Physik. Atlas, map 72, 1887.

Derivation: Contracted from Algomequin, an Algonkin word, signifying "those on the other side of the river," i. e., the St. Lawrence River.

ALGONQUIAN AREA.

The area formerly occupied by the Algonquian family was more extensive than that of any other linguistic stock in North America, their territory reaching from Labrador to the Rocky Mountains, and from Churchill River of Hudson Bay as far south at least as Pamlico Sound of North Carolina. In the eastern part of this territory was an area occupied by Iroquoian tribes, surrounded on almost all sides by their Algonquian neighbors. On the south the Algonquian tribes were bordered by those of Iroquoian and Siouan (Catawba) stock, on the southwest and west by the Muskhogean and Siouan tribes, and on the northwest by the Kitunahan and the great Athapascan families, while along the coast of Labrador and the eastern shore of Hudson Bay they came in contact with the Eskimo, who were gradually retreating before them to the north. In Newfoundland they encountered the Beothukan family, consisting of but a single tribe. A portion of the Shawnee at some early period had separated from the main body of the tribe in central Tennessee and pushed their way down to the Savannah River in South Carolina, where, known as Savannahs, they carried on destructive wars with the surrounding tribes until about the beginning of the eighteenth century they were finally driven out and joined the Delaware in the north. Soon afterwards the rest of the tribe was expelled by the Cherokee and Chicasa, who thenceforward claimed all the country stretching north to the Ohio River.

The Cheyenne and Arapaho, two allied tribes of this stock, had become separated from their kindred on the north and had forced their way through hostile tribes across the Missouri to the Black Hills country of South Dakota, and more recently into Wyoming and Colorado, thus forming the advance guard of the Algonquian stock in that direction, having the Siouan tribes behind them and those of the Shoshonean family in front.

PRINCIPAL ALGONQUIAN TRIBES.

Abnaki.	Menominee.	Ottawa.
Algonquin.	Miami.	Pamlico.
Arapaho.	Micmac.	Pennacook.
Cheyenne.	Mohegan.	Pequot.
Conoy.	Montagnais.	Piankishaw.
Cree.	Montauk.	Pottawotomi.
Delaware.	Munsee.	Powhatan.
Fox.	Nanticoke.	Sac.
Illinois.	Narraganset.	Shawnee.
Kickapoo.	Nauset.	Siksika.
Mahican.	Nipmuc.	Wampanoag.
Massachuset.	Ojibwa.	Wappinger.

Population.—The present number of the Algonquian stock is about 95,600, of whom about 60,000 are in Canada and the remainder in the United States. Below is given the population of the tribes officially recognized, compiled chiefly from the United States Indian Commissioner's report for 1889 and the Canadian Indian report for 1888. It is impossible to give exact figures, owing to the fact that in many instances two or more tribes are enumerated together, while many individuals are living with other tribes or amongst the whites:

Abnaki:		
"Oldtown Indians," Maine	410	
Passamaquoddy Indians, Maine	215?	
Abenakis of St. Francis and Bécancour, Quebec	369	
"Amalecites" of Témiscouata and Viger, Quebec	198	
"Amalecites" of Madawaska, etc., New Brunswick	682	
		1,874?
Algonquin:		
Of Renfrew, Golden Lake and Carleton, Ontario	797	
With Iroquois (total 131) at Gibson, Ontario	31?	
With Iroquois at Lake of Two Mountains, Quebec	30	
Quebec Province	3,909	
		4,767?
Arapaho:		
Cheyenne and Arapaho Agency, Indian Territory	1,272	
Shoshone Agency, Wyoming (Northern Arapaho)	885	
Carlisle school, Pennsylvania, and Lawrence school, Kansas	55	
		2,212

Cheyenne:		
Pine Ridge Agency, South Dakota (Northern Cheyenne)	517	
Cheyenne and Arapaho Agency, Indian Territory	2,091	
Carlisle school, Pennsylvania, and Lawrence school, Kansas	153	
Tongue River Agency, Montana (Northern Cheyenne)	865	
		3,626
Cree:		
With Salteau in Manitoba, etc., British America (treaties Nos. 1, 2, and 5; total, 6,066)	3,066?	
Plain and Wood Cree, treaty No. 6, Manitoba, etc	5,790	
Cree (with Salteau, etc.), treaty No. 4, Manitoba, etc	8,530	
		17,386?
Delaware, etc.:		
Kiowa, Comanche, and Wichita Agency, Indian Territory	95	
Incorporated with Cherokee, Indian Territory	1,000?	
Delaware with the Seneca in New York	3	
Hampton and Lawrence schools	3	
Muncie in New York, principally with Onondaga and Seneca	36	
Munsee with Stockbridge (total 133), Green Bay Agency, Wis.	23?	
Munsee with Chippewa at Pottawatomie and Great Nemaha Agency, Kansas (total 75)	37?	
Munsee with Chippewa on the Thames, Ontario	131	
"Moravians" of the Thames, Ontario	288	
Delaware with Six Nations on Grand River, Ontario	134	
		1,750?
Kickapoo:		
Sac and Fox Agency, Indian Territory	325	
Pottawatomie and Great Nemaha Agency, Kansas	237	
In Mexico	200?	
		762?
Menominee:		
Green Bay Agency, Wisconsin	1,311	
Carlisle school	1	
		1,312
Miami:		
Quapaw Agency, Indian Territory	67	
Indiana, no agency	300?	
Lawrence and Carlisle schools	7	
		374?
Micmac:		
Restigouche, Maria, and Gaspé, Quebec	732	
In Nova Scotia	2,145	
New Brunswick	912	
Prince Edward Island	319	
		4,108
Misisauga:		
Alnwick, New Credit, etc., Ontario		774
Monsoni, Maskegon, etc.:		
Eastern Rupert's Land, British America		4,016
Montagnais:		
Betsiamits, Lake St. John, Grand Romaine, etc., Quebec	1,607	
Seven Islands, Quebec	312	
		1,919
Nascapee:		
Lower St. Lawrence, Quebec		2,860

Ojibwa:		
White Earth Agency, Minnesota	6,263	
La Pointe Agency, Wisconsin	4,778	
Mackinac Agency, Michigan (about one-third of 5,563 Ottawa and Chippewa)	1,854?	
Mackinac Agency, Michigan (Chippewa alone)	1,351	
Devil's Lake Agency, North Dakota (Turtle Mountain Chippewa)	1,340	
Pottawatomie and Great Nemaha Agency, Kansas (one-half of 75 Chippewa and Muncie)	38?	
Lawrence and Carlisle schools	15	
"Ojibbewas" of Lake Superior and Lake Huron, Ontario	5,201	
"Chippewas" of Sarnia, etc., Ontario	1,956	
"Chippewas" with Munsees on Thames, Ontario	454	
"Chippewas" with Pottawatomies on Walpole Island, Ontario	658	
"Ojibbewas" with Ottawas (total 1,856) on Manitoulin and Cockburn Islands, Ontario	928?	
"Salteaux" of treaty Nos. 3 and 4, etc., Manitoba, etc	4,092	
"Chippewas" with Crees in Manitoba, etc., treaties Nos. 1, 2, and 5 (total Chippewa and Cree, 6,066)	3,000?	
		31,928?
Ottawa:		
Quapaw Agency, Indian Territory	137	
Mackinac Agency, Michigan (5,563 Ottawa and Chippewa)	3,709?	
Lawrence and Carlisle schools	20	
With "Ojibbewas" on Manitoulin and Cockburn Islands, Ontario	928	
		4,794?
Peoria, etc.:		
Quapaw Agency, Indian Territory	160	
Lawrence and Carlisle schools	5	
		165
Pottawatomie:		
Sac and Fox Agency, Indian Territory	480	
Pottawatomie and Great Nemaha Agency, Kansas	462	
Mackinac Agency, Michigan	77	
Prairie band, Wisconsin	280	
Carlisle, Lawrence and Hampton schools	117	
With Chippewa on Walpole Island, Ontario	166	
		1,582
Sac and Fox:		
Sac and Fox Agency, Indian Territory	515	
Sac and Fox Agency, Iowa	381	
Pottawatomie and Great Nemaha Agency, Kansas	77	
Lawrence, Hampton, and Carlisle schools	8	
		981
Shawnee:		
Quapaw Agency, Indian Territory	79	
Sac and Fox Agency, Indian Territory	640	
Incorporated with Cherokee, Indian Territory	800?	
Lawrence, Carlisle, and Hampton schools	40	
		1,559?
Siksika:		
Blackfoot Agency, Montana. (Blackfoot, Blood, Piegan)	1,811	
Blackfoot reserves in Alberta, British America (with Sarcee and Assiniboine)	4,932	
		6,743

Stockbridge (Mahican):		
Green Bay Agency, Wisconsin	110	
In New York (with Tuscarora and Seneca)	7	
Carlisle school	4	
		121

ATHAPASCAN FAMILY.

> Athapascas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 16, 305, 1836. Prichard, Phys. Hist. Mankind, V, 375, 1847. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852. Turner in "Literary World," 281, April 17, 1852 (refers Apache and Navajo to this family on linguistic evidence).

> Athapaccas, Gallatin in Schoolcraft, Ind. Tribes, III, 401, 1853. (Evident misprint.)

> Athapascan, Turner in Pac. R. R. Rep., III, pt. 3, 84, 1856. (Mere mention of family; Apaches and congeners belong to this family, as shown by him in "Literary World." Hoopah also asserted to be Athapascan.)

> Athabaskans, Latham, Nat. Hist. Man, 302, 1850. (Under Northern Athabaskans, includes Chippewyans Proper, Beaver Indians, Daho-dinnis, Strong Bows, Hare Indians, Dog-ribs, Yellow Knives, Carriers. Under Southern Athabaskans, includes (p. 308) Kwalioqwa, Tlatskanai, Umkwa.)

= Athabaskan, Latham in Trans. Philolog. Soc. Lond., 65, 96, 1856. Buschmann (1854), Der athapaskische Sprachstamm, 250, 1856 (Hoopahs, Apaches, and Navajoes included). Latham, Opuscula, 333, 1860. Latham, El. Comp. Phil., 388, 1862. Latham in Trans. Philolog. Soc. Lond., II, 31–50, 1846 (indicates the coalescence of Athabascan family with Esquimaux). Latham (1844), in Jour. Eth. Soc. Lond., I, 161, 1848 (Nagail and Taculli referred to Athabascan). Scouler (1846), in Jour. Eth. Soc. Lond., I, 230, 1848. Latham, Opuscula, 257, 259, 276, 1860. Keane, App. to Stanford's Comp. (Cent. and So. Am.), 460, 463, 1878.

> Kinai, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 14, 305, 1836 (Kinai and Ugaljachmutzi; considered to form a distinct family, though affirmed to have affinities with western Esquimaux and with Athapascas). Prichard, Phys. Hist. Mankind, V, 440–443, 1847 (follows Gallatin; also affirms a relationship to Aztec). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848.

> Kenay, Latham in Proc. Philolog. Soc. Lond., II, 32–34, 1846. Latham, Opuscula, 275, 1860. Latham, Elements Comp. Phil., 389, 1862 (referred to Esquimaux stock).

> Kinætzi, Prichard, Phys. Hist. Mankind, V, 441, 1847 (same as his Kinai above).

> Kenai, Gallatin in Trans. Am. Eth. Soc., II, xcix, 1848 (see Kinai above). Buschmann, Spuren der aztek. Sprache, 695, 1856 (refers it to Athapaskan).

× Northern, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 218, 1841. (Includes Atnas, Kolchans, and Kenáïes of present family.)

× Haidah, Scouler, ibid., 224 (same as his Northern family).

> Chepeyans, Prichard, Phys. Hist. Mankind, V, 375, 1847 (same as Athapascas above).

> Tahkali-Umkwa, Hale in U. S. Expl. Exp., VI, 198, 201, 569, 1846 ("a branch of the great Chippewyan, or Athapascan, stock;" includes Carriers, Qualioguas, Tlatskanies, Umguas). Gallatin, after Hale in Trans. Am. Eth. Soc., II, pt. 1, 9, 1848.

> Digothi, Berghaus (1845), Physik. Atlas, map 17, 1848. Digothi, Loucheux, ibid. 1852.

> Lipans, Latham, Nat. Hist. Man, 349, 1850 (Lipans (Sipans) between Rio Arkansas and Rio Grande).

> Tototune, Latham, Nat. Hist. Man, 325, 1850 (seacoast south of the Saintskla).
> Ugaljachmutzi, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 ("perhaps Athapascas").
> Umkwa, Latham in Proc. Philolog. Soc. Lond., VI, 72, 1854 (a single tribe). Latham, Opuscula, 300, 1860.
> Tahlewah, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (a single tribe). Latham in Trans. Philolog. Soc. Lond., 76, 1856 (a single tribe). Latham. Opuscula, 342, 1860.
> Tolewa, Gatschet in Mag. Am. Hist., 163, 1877 (vocab. from Smith River, Oregon; affirmed to be distinct from any neighboring tongue). Gatschet in Beach, Ind. Miscellany, 438, 1877.
> Hoo-pah, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (tribe on Lower Trinity, California).
> Hoopa, Powers in Overland Monthly, 155, August, 1872.
> Hú-pâ, Powers in Cont. N. A. Eth., III, 72, 1877 (affirmed to be Athapascan).
= Tinneh, Dall in Proc. Am. Ass. A. S., XVIII, 269, 1869 (chiefly Alaskan tribes). Dall, Alaska and its Resources, 428, 1870. Dall in Cont. N. A. Eth., I, 24, 1877. Bancroft, Native Races, III, 562, 583, 603, 1882.
= Tinné. Gatschet in Mag. Am, Hist., 165, 1877 (special mention of Hoopa, Rogue River, Umpqua.) Gatschet in Beach, Ind. Misc., 440, 1877. Gatschet in Geog. Surv. W. 100th M., VII, 406, 1879. Tolmie and Dawson, Comp. Vocabs., 62, 1884. Berghaus, Physik. Atlas, map 72, 1887.
= Tinney, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 460, 463, 1878.
× Klamath, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 475, 1878; or Lutuami, (Lototens and Tolewahs of his list belong here.)

Derivation: From the lake of the same name; signifying, according to Lacombe, "place of hay and reeds."

As defined by Gallatin, the area occupied by this great family is included in a line drawn from the mouth of the Churchill or Missinippi River to its source; thence along the ridge which separates the north branch of the Saskatchewan from those of the Athapascas to the Rocky Mountains; and thence northwardly till within a hundred miles of the Pacific Ocean, in latitude 52° 30′.

The only tribe within the above area excepted by Gallatin as of probably a different stock was the Quarrelers or Loucheux, living at the mouth of Mackenzie River. This tribe, however, has since been ascertained to be Athapascan.

The Athapascan family thus occupied almost the whole of British Columbia and of Alaska, and was, with the exception of the Eskimo, by whom they were cut off on nearly all sides from the ocean, the most northern family in North America.

Since Gallatin's time the history of this family has been further elucidated by the discovery on the part of Hale and Turner that isolated branches of the stock have become established in Oregon, California, and along the southern border of the United States.

The boundaries of the Athapascan family, as now understood, are best given under three primary groups—Northern, Pacific, and Southern.

Northern group.—This includes all the Athapascan tribes of British North America and Alaska. In the former region the Athapascans occupy most of the western interior, being bounded on the north by the Arctic Eskimo, who inhabit a narrow strip of coast; on the east by the Eskimo of Hudson's Bay as far south as Churchill River, south of which river the country is occupied by Algonquian tribes. On the south the Athapascan tribes extended to the main ridge between the Athapasca and Saskatchewan Rivers, where they met Algonquian tribes; west of this area they were bounded on the south by Salishan tribes, the limits of whose territory on Fraser River and its tributaries appear on Tolmie and Dawson's map of 1884. On the west, in British Columbia, the Athapascan tribes nowhere reach the coast, being cut off by the Wakashan, Salishan, and Chimmesyan families.

The interior of Alaska is chiefly occupied by tribes of this family. Eskimo tribes have encroached somewhat upon the interior along the Yukon, Kuskokwim, Kowak, and Noatak Rivers, reaching on the Yukon to somewhat below Shageluk Island,[1] and on the Kuskokwim nearly or quite to Kolmakoff Redoubt.[2] Upon the two latter they reach quite to their heads.[3] A few Kutchin tribes are (or have been) north of the Porcupine and Yukon Rivers, but until recently it has not been known that they extended north beyond the Yukon and Romanzoff Mountains. Explorations of Lieutenant Stoney, in 1885, establish the fact that the region to the north of those mountains is occupied by Athapascan tribes, and the map is colored accordingly. Only in two places in Alaska do the Athapascan tribes reach the coast—the K'naia-khotana, on Cook's Inlet, and the Ahtena, of Copper River.

Pacific group.—Unlike the tribes of the Northern group, most of those of the Pacific group have removed from their priscan habitats since the advent of the white race. The Pacific group embraces the following: Kwalhioqua, formerly on Willopah River, Washington, near the Lower Chinook;[4] Owilapsh, formerly between Shoalwater Bay and the heads of the Chehalis River, Washington, the territory of these two tribes being practically continuous; Tlatscanai, formerly on a small stream on the northwest side of Wapatoo Island.[5] Gibbs was informed by an old Indian that this tribe "formerly owned the prairies on the Tsihalis at the mouth of the Skukumchuck, but, on the failure of game, left the country, crossed the Columbia River, and occupied the mountains to the

[1] Dall, Map Alaska, 1877.

[2] Fide Nelson in Dall's address, Am. Assoc. Adv. Sci., 1885, p. 13.

[3] Cruise of the *Corwin*, 1887.

[4] Gibbs in Pac. R. R. Rep. I, 1855, p. 428.

[5] Lewis and Clarke, Exp., 1814, vol. 2, p. 382

south"—a statement of too uncertain character to be depended upon; the Athapascan tribes now on the Grande Ronde and Siletz Reservations, Oregon,[1] whose villages on and near the coast extended from Coquille River southward to the California line, including, among others, the Upper Coquille, Sixes, Euchre, Creek, Joshua, Tutu tûnnĕ, and other "Rogue River" or "Tou-touten bands," Chasta Costa, Galice Creek, Naltunne tûnnĕ and Chetco villages;[2] the Athapascan villages formerly on Smith River and tributaries, California;[3] those villages extending southward from Smith River along the California coast to the mouth of Klamath River;[4] the Hupâ villages or "clans" formerly on Lower Trinity River, California;[5] the Kenesti or Wailakki (2), located as follows: "They live along the western slope of the Shasta Mountains, from North Eel River, above Round Valley, to Hay Fork; along Eel and Mad Rivers, extending down the latter about to Low Gap; also on Dobbins and Larrabie Creeks;"[6] and Saiaz, who "formerly occupied the tongue of land jutting down between Eel River and Van Dusen's Fork."[7]

Southern group.—Includes the Navajo, Apache, and Lipan. Engineer José Cortez, one of the earliest authorities on these tribes, writing in 1799, defines the boundaries of the Lipan and Apache as extending north and south from 29° N. to 36° N., and east and west from 99° W. to 114° W.; in other words from central Texas nearly to the Colorado River in Arizona, where they met tribes of the Yuman stock. The Lipan occupied the eastern part of the above territory, extending in Texas from the Comanche country (about Red River) south to the Rio Grande.[8] More recently both Lipan and Apache have gradually moved southward into Mexico where they extend as far as Durango.[9]

The Navajo, since first known to history, have occupied the country on and south of the San Juan River in northern New Mexico and Arizona and extending into Colorado and Utah. They were surrounded on all sides by the cognate Apache except upon the north, where they meet Shoshonean tribes.

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[1] Gatschet and Dorsey, MS., 1883–'84.

[2] Dorsey, MS., map, 1884, B. E.

[3] Hamilton, MS., Haynarger Vocab., B. E.; Powers, Contr. N. A. Ethn., 1877, vol. 3, p. 65.

[4] Dorsey, MS., map, 1884, B. E.

[5] Powers, Contr. N. A. Ethn., 1877, vol. 3, pp. 72, 73.

[6] Powers, Contr. N. A. Ethn., 1877, vol. 3, p. 114.

[7] Powers, Contr. N. A. Ethn., 1877, vol. 3, p. 122.

[8] Cortez in Pac. R. R. Rep., 1856, vol. 3, pt. 3, pp. 118, 119.

[9] Bartlett, Pers. Narr., 1854; Orozco y Berra, Geog., 1864.

PRINCIPAL TRIBES.

A. Northern group:

Ah-tena.	Kutchin.	Sluacus-tinneh.
Kaiyuh-khotana.	Montagnais.	Taculli.
Kcaltana.	Montagnards.	Tahl-tan (1).
K'naia-khotana.	Nagailer.	Unakhotana.
Koyukukhotana.	Slave.	

B. Pacific group:

Ătaăkût.	Kwalhioqua.	Taltûctun tûde (on Galice Creek).
Chasta Costa.	Kwaqami.	
Chetco.	Micikqwûtme tûnnĕ.	Tcêmê (Joshuas).
Dakube tede (on Applegate Creek).	Mikono tûnnĕ.	Tcĕtlĕstcan tûnnĕ.
	Naltunne tûnnĕ.	Terwar.
Euchre Creek.	Owilapsh.	Tlatscanai.
Hupâ.	Qwinctûnnetûn.	Tolowa.
Kălts'erea tûnnĕ.	Saiaz.	Tutu tûnnĕ.
Kenesti or Wailakki.		

C. Southern group):

Arivaipa.	Lipan.	Navajo.
Chiricahua.	Llanero.	Pinal Coyotero.
Coyotero.	Mescalero.	Tchĭkûn.
Faraone.	Mimbreño.	Tchishi.
Gileño.	Mogollon.	
Jicarilla.	Na-isha.	

Population.—The present number of the Athapascan family is about 32,899, of whom about 8,595, constituting the Northern group, are in Alaska and British North America, according to Dall, Dawson, and the Canadian Indian Report for 1888; about 895, comprising the Pacific group, are in Washington, Oregon, and California; and about 23,409, belonging to the Southern group, are in Arizona, New Mexico, Colorado, and Indian Territory. Besides these are the Lipan and some refugee Apache, who are in Mexico. These have not been included in the above enumeration, as there are no means of ascertaining their number.

Northern group.—This may be said to consist of the following:

Ah-tena (1877)		364?
Ai-yan (1888)		250
Al-ta-tin (Sicannie) estimated (1888)		500
of whom there are at Fort Halkett (1887)	73	
of whom there are at Fort Liard (1887)	78	
Chippewyan, Yellow Knives, with a few Slave and Dog Rib at Fort Resolution		469
Dog Rib at Fort Norman		133
Dog Rib, Slave, and Yellow Knives at Fort Rae		657
Hare at Fort Good Hope		364

Hare at Fort Norman		108
Kai-yuh-kho-tána (1877), Koyukukhotána (1877), and Unakhotána (1877)		2,000?
K'nai-a Khotána (1880)		250?
Kutchin and Bastard Loucheux at Fort Good Hope		95
Kutchin at Peel River and La Pierre's House		337
Kutchin on the Yukon (six tribes)		842
Nahanie at Fort Good Hope	8	
Nahanie at Fort Halkett (including Mauvais Monde, Bastard Nahanie, and Mountain Indians)	332	
Nahanie at Fort Liard	38	
Nahanie at Fort Norman	43	
		421
Nahanie at Fort Simpson and Big Island (Hudson Bay Company's Territory)		87
Slave, Dog Rib, and Hare at Fort Simpson and Big Island (Hudson Bay Company's Territory)		658
Slave at Fort Liard		281
Slave at Fort Norman		84
Tenán Kutchin (1877)		700?
		8,595?

To the Pacific Group may be assigned the following:

Hupa Indians, on Hoopa Valley Reservation, California	468
Rogue River Indians at Grande Ronde Reservation, Oregon	47
Siletz Reservation, Oregon (about one-half the Indians thereon)	300?
Umpqua at Grande Ronde Reservation, Oregon	80
	895?

Southern Group, consisting of Apache, Lipan, and Navajo:

Apache children at Carlisle, Pennsylvania	142
Apache prisoners at Mount Vernon Barracks, Alabama	356
Coyotero Apache (San Carlos Reservation)	733?
Jicarilla Apache (Southern Ute Reservation, Colorado)	808
Lipan with Tonkaway on Oakland Reserve, Indian Territory	15?
Mescalero Apache (Mescalero Reservation, New Mexico)	513
Na-isha Apache (Kiowa, Comanche, and Wichita Reservation, Indian Territory)	326
Navajo (most on Navajo Reservation, Arizona and New Mexico; 4 at Carlisle, Pennsylvania)	17,208
San Carlos Apache (San Carlos Reservation, Arizona)	1,352?
White Mountain Apache (San Carlos Reservation, Arizona)	36
White Mountain Apache (under military at Camp Apache, Arizona)	1,920
	23,409?

ATTACAPAN FAMILY.

=Attacapas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 306, 1836. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Latham, Nat. Hist. Man, 343, 1850 (includes Attacapas and Carankuas). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853. Buschmann, Spuren der aztek. Sprache, 426, 1859.

=Attacapa, Latham in Proc. Philolog. Soc. Lond., II, 31–50, 1846. Prichard, Phys. Hist. Mankind, V, 406, 1847 (or "Men eaters"). Latham in Trans. Philolog. Soc. Lond., 105, 1856. Latham, Opuscula, 293, 1860.

=Attakapa, Latham in Trans. Philolog. Soc. Lond., 103, 1856. Latham, Opuscula, 366, 1860. Latham, El. Comp. Phil., 477, 1862 (referred to as one of the two most isolated languages of N. A.).

=Atákapa, Gatschet, Creek Mig. Leg., I, 45, 1884. Gatschet in Science, 414, Apr. 29, 1887.

Derivation: From a Choctaw word meaning "man-eater."

Little is known of the tribe, the language of which forms the basis of the present family. The sole knowledge possessed by Gallatin was derived from a vocabulary and some scanty information furnished by Dr. John Sibley, who collected his material in the year 1805. Gallatin states that the tribe was reduced to 50 men. According to Dr. Sibley the Attacapa language was spoken also by another tribe, the "Carankouas," who lived on the coast of Texas, and who conversed in their own language besides. In 1885 Mr. Gatschet visited the section formerly inhabited by the Attacapa and after much search discovered one man and two women at Lake Charles, Calcasieu Parish, Louisiana, and another woman living 10 miles to the south; he also heard of five other women then scattered in western Texas; these are thought to be the only survivors of the tribe. Mr. Gatschet collected some two thousand words and a considerable body of text. His vocabulary differs considerably from the one furnished by Dr. Sibley and published by Gallatin, and indicates that the language of the western branch of the tribe was dialectically distinct from that of their brethren farther to the east.

The above material seems to show that the Attacapa language is distinct from all others, except possibly the Chitimachan.

BEOTHUKAN FAMILY.

=Bethuck, Latham in Trans. Philolog. Soc. Lond., 58, 1856 (stated to be "Algonkin rather than aught else"). Latham, Opuscula, 327, 1860. Latham, El. Comp. Phil., 453, 1862.

=Beothuk, Gatschet in Proc. Am. Philosoph. Soc., 408, Oct., 1885. Gatschet, ibid., 411, July, 1886 (language affirmed to represent a distinct linguistic family). Gatschet, ibid., 1, Jan.–June, 1890.

Derivation: Beothuk signifies "Indian" or "red Indian."

The position of the language spoken by the aborigines of Newfoundland must be considered to be doubtful.

In 1846 Latham examined the material then accessible, and was led to the somewhat ambiguous statement that the language "was akin to those of the ordinary American Indians rather than to the Eskimo; further investigation showing that, of the ordinary American languages, it was Algonkin rather than aught else."

Since then Mr. Gatschet has been able to examine a much larger and more satisfactory body of material, and although neither in amount nor quality is the material sufficient to permit final and

satisfactory deductions, yet so far as it goes it shows that the language is quite distinct from any of the Algonquian dialects, and in fact from any other American tongue.

GEOGRAPHIC DISTRIBUTION.

It seems highly probable that the whole of Newfoundland at the time of its discovery by Cabot in 1497 was inhabited by Beothuk Indians.

In 1534 Cartier met with Indians inhabiting the southeastern part of the island, who, very likely, were of this people, though the description is too vague to permit certain identification. A century later the southern portion of the island appears to have been abandoned by these Indians, whoever they were, on account of European settlements, and only the northern and eastern parts of the island were occupied by them. About the beginning of the eighteenth century western Newfoundland was colonized by the Micmac from Nova Scotia. As a consequence of the persistent warfare which followed the advent of the latter and which was also waged against the Beothuk by the Europeans, especially the French, the Beothuk rapidly wasted in numbers. Their main territory was soon confined to the neighborhood of the Exploits River. The tribe was finally lost sight of about 1827, having become extinct, or possibly the few survivors having crossed to the Labrador coast and joined the Nascapi with whom the tribe had always been on friendly terms.

Upon the map only the small portion of the island is given to the Beothuk which is known definitely to have been occupied by them, viz., the neighborhood of the Exploits River, though, as stated above, it seems probable that the entire island was once in their possession.

CADDOAN FAMILY.

>Caddoes, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 306, 1836 (based on Caddoes alone). Prichard, Phys. Hist. Mankind, v, 406, 1847. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 [gives as languages Caddo, Red River, (Nandakoes, Tachies, Nabedaches)].

>Caddokies, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 1836 (same as his Caddoes). Prichard, Phys. Hist. Mankind, v, 406, 1847.

>Caddo, Latham in Trans. Philolog. Soc. Lond., II, 31–50, 1846 (indicates affinities with Iroquois, Muskoge, Catawba, Pawnee). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848, (Caddo only). Berghaus (1845), Physik. Atlas, map 17, 1848 (Caddos, etc.). Ibid., 1852. Latham, Nat. Hist. Man, 338, 1850 (between the Mississippi and Sabine). Latham in Trans. Philolog. Soc., Lond., 101, 1856. Turner in Pac. R. R. Rep., III, pt. 3, 55, 70, 1856 (finds resemblances to Pawnee but keeps them separate). Buschmann, Spuren der aztek. Sprache, 426, 448, 1859. Latham, Opuscula, 290, 366, 1860.

>Caddo, Latham, Elements Comp. Phil., 470, 1862 (includes Pawni and Riccari).

>Pawnees, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 128, 306, 1836 (two nations: Pawnees proper and Ricaras or Black Pawnees). Prichard, Phys. Hist. Mankind, v, 408, 1847 (follows Gallatin). Gallatin in Trans. Am. Eth. Soc.,

II, pt. 1, xcix, 1848. Latham, Nat. Hist. Man, 344, 1850 (or Panis; includes Loup and Republican Pawnees). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (gives as languages: Pawnees, Ricaras, Tawakeroes, Towekas, Wachos?). Hayden, Cont. Eth. and Phil. Missouri Indians, 232, 345, 1862 (includes Pawnees and Arikaras).

>Panis, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 117, 128, 1836 (of Red River of Texas; mention of villages; doubtfully indicated as of Pawnee family). Prichard, Phys. Hist. Mankind, V, 407, 1847 (supposed from name to be of same race with Pawnees of the Arkansa). Latham, Nat. Hist. Man, 344, 1850 (Pawnees or). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (here kept separate from Pawnee family).

>Pawnies, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848 (see Pawnee above).

>Pahnies, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

>Pawnee(?), Turner in Pac. R. R. Rep., III, pt. 3, 55, 65, 1856 (Kichai and Hueco vocabularies).

=Pawnee, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 478, 1878 (gives four groups, viz: Pawnees proper; Arickarees; Wichitas; Caddoes).

=Pani, Gatschet, Creek Mig. Legend, I, 42, 1884. Berghaus, Physik. Atlas, map 72, 1887.

>Towiaches, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 128, 1836 (same as Panis above). Prichard, Phys. Hist. Mankind, V, 407, 1847.

>Towiachs, Latham, Nat. Hist. Man, 349, 1850 (includes Towiach, Tawakenoes, Towecas?, Wacos).

>Towiacks, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853.

>Natchitoches, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 1836 (stated by Dr. Sibley to speak a language different from any other). Latham, Nat. Hist. Man, 342, 1850. Prichard, Phys. Hist. Mankind, V, 406, 1847 (after Gallatin). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (a single tribe only).

>Aliche, Latham, Nat. Hist. Man, 349, 1850 (near Nacogdoches; not classified).

>Yatassees, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 116, 1836 (the single tribe; said by Dr. Sibley to be different from any other; referred to as a family).

>Riccarees, Latham, Nat. Hist. Man, 344, 1850 (kept distinct from Pawnee family).

>Washita, Latham in Trans. Philolog. Soc., Lond., 103, 1856. Buschmann, Spuren der aztek. Sprache, 441, 1859 (revokes previous opinion of its distinctness and refers it to Pawnee family).

>Witchitas, Buschmann, ibid., (same as his Washita).

Derivation: From the Caddo term ka'-ede, signifying "chief" (Gatschet).

The Pawnee and Caddo, now known to be of the same linguistic family, were supposed by Gallatin and by many later writers to be distinct, and accordingly both names appear in the Archæologia Americana as family designations. Both names are unobjectionable, but as the term Caddo has priority by a few pages preference is given to it.

Gallatin states "that the Caddoes formerly lived 300 miles up Red River but have now moved to a branch of Red River." He refers to the Nandakoes, the Inies or Tachies, and the Nabedaches as speaking dialects of the Caddo language.

Under Pawnee two tribes were included by Gallatin: The Pawnees proper and the Ricaras. The Pawnee tribes occupied the country on the Platte River adjoining the Loup Fork. The Ricara towns were on the upper Missouri in latitude 46° 30′.

The boundaries of the Caddoan family, as at present understood, can best be given under three primary groups, Northern, Middle, and Southern.

Northern group.—This comprises the Arikara or Ree, now confined to a small village (on Fort Berthold Reservation, North Dakota,) which they share with the Mandan and Hidatsa tribes of the Siouan family. The Arikara are the remains of ten different tribes of "Paneas," who had been driven from their country lower down the Missouri River (near the Ponka habitat in northern Nebraska) by the Dakota. In 1804 they were in three villages, nearer their present location.[1]

According to Omaha tradition, the Arikara were their allies when these two tribes and several others were east of the Mississippi River.[2] Fort Berthold Reservation, their present abode, is in the northwest corner of North Dakota.

Middle group.—This includes the four tribes or villages of Pawnee, the Grand, Republican, Tapage, and Skidi. Dunbar says: "The original hunting ground of the Pawnee extended from the Niobrara," in Nebraska, "south to the Arkansas, but no definite boundaries can be fixed." In modern times their villages have been on the Platte River west of Columbus, Nebraska. The Omaha and Oto were sometimes southeast of them near the mouth of the Platte, and the Comanche were northwest of them on the upper part of one of the branches of the Loup Fork.[3] The Pawnee were removed to Indian Territory in 1876. The Grand Pawnee and Tapage did not wander far from their habitat on the Platte. The Republican Pawnee separated from the Grand about the year 1796, and made a village on a "large northwardly branch of the Kansas River, to which they have given their name; afterwards they subdivided, and lived in different parts of the country on the waters of Kansas River. In 1805 they rejoined the Grand Pawnee." The Skidi (Panimaha, or Pawnee Loup), according to Omaha tradition,[4] formerly dwelt east of the Mississippi River, where they were the allies of the Arikara, Omaha, Ponka, etc. After their passage of the Missouri they were conquered by the Grand Pawnee, Tapage, and Republican tribes, with whom they have remained to this day. De L'Isle[5] gives twelve Panimaha villages on the Missouri River north of the Pani villages on the Kansas River.

Southern group.—This includes the Caddo, Wichita, Kichai, and other tribes or villages which were formerly in Texas, Louisiana, Arkansas, and Indian Territory.

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[1] Lewis, Travels of Lewis and Clarke, 15, 1809.
[2] Dorsey in Am. Naturalist, March, 1886, p. 215.
[3] Dorsey, Omaha map of Nebraska.
[4] Dorsey in Am. Nat., March, 1886, p. 215.
[5] Carte de la Louisiane, 1718.

The Caddo and Kichai have undoubtedly been removed from their priscan habitats, but the Wichita, judging from the survival of local names (Washita River, Indian Territory, Wichita Falls, Texas) and the statement of La Harpe,[1] are now in or near one of their early abodes. Dr. Sibley[2] locates the Caddo habitat 35 miles west of the main branch of Red River, being 120 miles by land from Natchitoches, and they formerly lived 375 miles higher up. Cornell's Atlas (1870) places Caddo Lake in the northwest corner of Louisiana, in Caddo County. It also gives both Washita and Witchita as the name of a tributary of Red River of Louisiana. This duplication of names seems to show that the Wichita migrated from northwestern Louisiana and southwestern Arkansas to the Indian Territory. After comparing the statements of Dr. Sibley (as above) respecting the habitats of the Anadarko, Ioni, Nabadache, and Eyish with those of Schermerhorn respecting the Kädo hadatco,[3] of Le Page Du Pratz (1758) concerning the Natchitoches, of Tonti[4] and La Harpe[5] about the Yatasi, of La Harpe (as above) about the Wichita, and of Sibley concerning the Kichai, we are led to fix upon the following as the approximate boundaries of the habitat of the southern group of the Caddoan family: Beginning on the northwest with that part of Indian Territory now occupied by the Wichita, Chickasaw, and Kiowa and Comanche Reservations, and running along the southern border of the Choctaw Reservation to the Arkansas line; thence due east to the headwaters of Washita or Witchita River, Polk County, Arkansas; thence through Arkansas and Louisiana along the western bank of that river to its mouth; thence southwest through Louisiana striking the Sabine River near Salem and Belgrade; thence southwest through Texas to Tawakonay Creek, and along that stream to the Brazos River; thence following that stream to Palo Pinto, Texas; thence northwest to the mouth of the North Fork of Red River; and thence to the beginning.

PRINCIPAL TRIBES.

A. Pawnee.
   Grand Pawnee.
   Tappas.
   Republican Pawnee.
   Skidi.
B. Arikara.
C. Wichita.
   (Ki-ȼi′-tcac, Omaha pronunciation of the name of a Pawnee tribe, Ki-dhi′-chash or Ki-ri′-chash).

[1] In 1719, *fide* Margry, VI, 289, "the Ousita village is on the southwest branch of the Arkansas River.

[2] 1805, in Lewis and Clarke, Discov., 1806, p. 66.

[3] Second Mass. Hist. Coll., vol. 2, 1814, p. 23.

[4] 1690, in French, Hist. Coll. La., vol. 1, p. 72.

[5] 1719, in Margry, vol. 6, p. 264.

D. Kichai.

E. Caddo (Kä'-do).

Population.—The present number of the Caddoan stock is 2,259, of whom 447 are on the Fort Berthold Reservation, North Dakota, and the rest in the Indian Territory, some on the Ponca, Pawnee, and Otoe Reservation, the others on the Kiowa, Comanche, and Wichita Reservation. Below is given the population of the tribes officially recognized, compiled chiefly from the Indian Report for 1889:

Arikara		448
Pawnee		824
Wichita	176	
Towakarehu	145	
Waco	64	
		385
Kichai		63
Caddo		539
Total		2,259

CHIMAKUAN FAMILY.

=Chimakum, Gibbs in Pac. R. R. Rep., I, 431, 1855 (family doubtful).

=Chemakum, Eells in Am. Antiquarian, 52, Oct., 1880 (considers language different from any of its neighbors).

<Puget Sound Group, Keane, App. Stanford's Comp. (Cent. and So. Am.), 474, 1878 (Chinakum included in this group).

<Nootka, Bancroft, Native Races, III, 564, 1882 (contains Chimakum).

Derivation unknown.

Concerning this language Gibbs, as above cited, states as follows:

The language of the Chimakum "differs materially from either that of the Clallams or the Nisqually, and is not understood by any of their neighbors. In fact, they seem to have maintained it a State secret. To what family it will ultimately be referred, cannot now be decided."

Eells also asserts the distinctness of this language from any of its neighbors. Neither of the above authors assigned the language family rank, and accordingly Mr. Gatschet, who has made a comparison of vocabularies and finds the language to be quite distinct from any other, gives it the above name.

The Chimakum are said to have been formerly one of the largest and most powerful tribes of Puget Sound. Their warlike habits early tended to diminish their numbers, and when visited by Gibbs in 1854 they counted only about seventy individuals. This small remnant occupied some fifteen small lodges on Port Townsend Bay. According to Gibbs "their territory seems to have embraced the shore from Port Townsend to Port Ludlow."[1] In 1884 there were, according to

[1] Dr. Boas was informed in 1889, by a surviving Chimakum woman and several Clallam, that the tribe was confined to the peninsula between Hood's Canal and Port Townsend.

Mr. Myron Eells, about twenty individuals left, most of whom are living near Port Townsend, Washington. Three or four live upon the Skokomish Reservation at the southern end of Hood's Canal.

The Quile-ute, of whom in 1889 there were 252 living on the Pacific south of Cape Flattery, belong to the family. The Hoh, a sub-tribe of the latter, number 71 and are under the Puyallup Agency.

PRINCIPAL TRIBES.

The following tribes are recognized:

Chimakum. Quile-ute.

CHIMARIKAN FAMILY.

=Chim-a-ri'-ko, Powell in Cont. N. A. Eth., III, 474, 1877. Gatschet in Mag. Am. Hist., 255, Apr.l, 1882 (stated to be a distinct family).

According to Powers, this family was represented, so far as known, by two tribes in California, one the Chi-mál-a-kwe, living on New River, a branch of the Trinity, the other the Chimariko, residing upon the Trinity itself from Burnt Ranch up to the mouth of North Fork, California. The two tribes are said to have been as numerous formerly as the Hupa, by whom they were overcome and nearly exterminated. Upon the arrival of the Americans only twenty-five of the Chimalakwe were left. In 1875 Powers collected a Chimariko vocabulary of about two hundred words from a woman, supposed to be one of the last three women of that tribe. In 1889 Mr. Curtin, while in Hoopa Valley, found a Chimariko man seventy or more years old, who is believed to be one of the two living survivors of the tribe. Mr. Curtin obtained a good vocabulary and much valuable information relative to the former habitat and history of the tribe. Although a study of these vocabularies reveals a number of words having correspondences with the Kulanapan (Pomo) equivalents, yet the greater number show no affinities with the dialects of the latter family, or indeed with any other. The family is therefore classed as distinct.

PRINCIPAL TRIBES.

Chimariko. Chimalakwe.

CHIMMESYAN FAMILY.

=Chimmesyan, Latham in Jour. Eth. Soc. Lond., I, 154, 1848 (between 53° 30' and 55° 30' N. L.). Latham, Opuscula, 250, 1860.

Chemmesyan, Latham, Nat. Hist. Man, 300, 1850 (includes Naaskok, Chemmesyan, Kitshatlah, Kethumish). Latham in Trans. Philolog. Soc. Lond., 72, 1856. Latham, Opuscula, 339, 1860. Latham, Elements Comp. Phil., 401, 1862.

=Chymseyans, Kane, Wanderings of an Artist, app., 1859 (a census of tribes of N. W. coast classified by languages).

=Chimsyans, Schoolcraft, Ind. Tribes, v, 487, 1855 (gives Kane's list but with many orthographical changes). Dall in Proc. Am. Ass., 269, 1869 (published in 1870).

Dall in Cont. N. A. Eth., I, 36, 39, 40, 1877 (probably distinct from T'linkets). Bancroft, Native Races, III, 564, 607, 1882.

=Tshimsian, Tolmie and Dawson, Comp. Vocabs., 14–25, 1884.

=Tsimpsi-an', Dall in Proc. Am. Ass., 379, 1885 (mere mention of family).

×Northern, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 220, 1841 (includes Chimmesyans).

×Haidah, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 220, 1841 (same as his Northern family).

<Naas, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 1848 (including Chimmesyan). Berghaus (1851), Physik. Atlas, map 17, 1852.

<Naass, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853.

=Nasse, Dall in Cont. N. A. Eth., I, 36, 40, 1877 (or Chimsyan).

<Nass, Bancroft, Nat. Races, III, 564, 606, 1882 (includes Nass and Sebassa Indians of this family, also Hailtza).

=Hydahs, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 473, 1878 (includes Tsimsheeans, Nass, Skeenas, Sebasses of present family).

Derivation: From the Chimsian ts'em, "on;" kcian, "main river:" "On the main (Skeena) river."

This name appears in a paper of Latham's published in 1848. To it is referred a vocabulary of Tolmie's. The area where it is spoken is said by Latham to be 50° 30′ and 55° 30′. The name has become established by long usage, and it is chiefly on this account that it has been given preference over the Naas of Gallatin of the same year. The latter name was given by Gallatin to a group of languages now known to be not related, viz, Hailstla, Haceltzuk Billechola, and Chimeysan. Billechola belongs under Salishan, a family name of Gallatin's of 1836.

Were it necessary to take Naas as a family name it would best apply to Chimsian, it being the name of a dialect and village of Chimsian Indians, while it has no pertinency whatever to Hailstla and Haceltzuk, which are closely related and belong to a family quite distinct from the Chimmesyan. As stated above, however, the term Naas is rejected in favor of Chimmesyan of the same date.

For the boundaries of this family the linguistic map published by Tolmie and Dawson, in 1884, is followed.

PRINCIPAL TRIBES.

Following is a list of the Chimmesyan tribes, according to Boas:[1]

A. Nasqa':
  Nasqa'.
  Gyitksa'n.
B. Tsimshian proper:
  Ts'emsia'n.
  Gyits'umrä'lon.
  Gyits'ala'ser.
  Gyitqā'tla.
  Gyitg·ā'ata.
  Gyidesdzo'.

Population.—The Canadian Indian Report for 1888 records a total for all the tribes of this family of 5,000. In the fall of 1887 about 1,000 of these Indians, in charge of Mr. William Duncan, removed

[1] B. A. A. S. Fifth Rep. of Committee on NW. Tribes of Canada. Newcastle-upon-Tyne meeting, 1889, pp. 8–9.

to Annette Island, about 60 miles north of the southern boundary of Alaska, near Port Chester, where they have founded a new settlement called New Metlakahtla. Here houses have been erected, day and industrial schools established, and the Indians are understood to be making remarkable progress in civilization.

CHINOOKAN FAMILY.

>Chinooks, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 134, 306, 1836 (a single tribe at mouth of Columbia).

=Chinooks, Hale in U. S. Expl. Expd., VI, 198, 1846. Gallatin, after Hale, in Trans. Am. Eth. Soc., II, pt. 1, 15, 1848 (or Tsinuk).

=Tshinuk, Hale in U. S. Expl. Expd., VI, 562, 569, 1846 (contains Watlala or Upper Chinook, including Watlala, Nihaloitih, or Echeloots; and Tshinuk, including Tshinuk, Tlatsap, Wakaikam).

=Tsinuk, Gallatin, after Hale, in Trans. Am. Eth. Soc., II, pt. 1, 15, 1848. Berghaus (1851), Physik. Atlas, map 17, 1852.

>Cheenook, Latham in Jour. Eth. Soc. Lond., I, 236, 1848. Latham, Opuscula, 253, 1860.

>Chinuk, Latham, Nat. Hist. Man, 317, 1850 (same as Tshinúk; includes Chinúks proper, Klatsops, Kathlamut, Wakáikam, Watlala, Nihaloitih). Latham in Trans. Philolog. Soc. Lond., 73, 1856 (mere mention of family name). Latham, Opuscula, 340, 1860. Buschmann, Spuren der aztek. Sprache, 616-619, 1859.

=Tschinuk, Berghaus (1851), Physik. Atlas, map 17, 1852. Latham in Trans. Philolog. Soc. Lond., 73, 1856 (mere mention of family name). Latham, Opuscula, 340, 1860. Latham, El. Comp. Phil., 402, 1862 (cites a short vocabulary of Watlala).

=Tshinook, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (Chinooks, Clatsops, and Watlala). Tolmie and Dawson, Comp. Vocabs. Brit. Col., 51, 61, 1884.

>Tshinuk, Buschmann, Spuren der aztek. Sprache, 616, 1859 (same as his Chinuk).

=T'sinūk, Dall, after Gibbs, in Cont. N. A. Eth., I, 241, 1877 (mere mention of family).

=Chinook, Gatschet in Mag. Am. Hist., 167, 1877 (names and gives habitats of tribes). Gatschet in Beach, Ind. Misc., 442, 1877.

<Chinooks, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 474, 1878 (includes Skilloots, Watlalas, Lower Chinooks, Wakiakums, Cathlamets, Clatsops, Calapooyas, Clackamas, Killamooks, Yamkally, Chimook Jargon; of these Calapooyas and Yamkally are Kalapooian, Killamooks are Salishan).

>Chinook, Bancroft, Nat. Races, III, 565, 626-628, 1882 (enumerates Chinook, Wakiakum, Cathlamet, Clatsop, Multnomah, Skilloot, Watlala).

×Nootka-Columbian, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 224, 1841 (includes Cheenooks, and Cathlascons of present family).

×Southern, Scouler, ibid., 224 (same as his Nootka-Columbian family above).

The vocabulary of the Chinook tribe, upon which the family name was based, was derived from the mouth of the Columbia. As now understood the family embraces a number of tribes, speaking allied languages, whose former homes extended from the mouth of the river for some 200 miles, or to The Dalles. According to Lewis and Clarke, our best authorities on the pristine home of this family, most of their villages were on the banks of the river, chiefly upon the northern bank, though they probably claimed the land upon either bank for several miles back.

Their villages also extended on the Pacific coast north nearly to the northern extreme of Shoalwater Bay, and to the south to about Tillamook Head, some 20 miles from the mouth of the Columbia.

PRINCIPAL TRIBES.

Lower Chinook:	Cathlapotle.	Echeloot.
Chinook.	Chilluckquittequaw.	Multnoma.
Clatsop.	Clackama.	Wahkiacum.
Upper Chinook:	Cooniac.	Wasco.
Cathlamet.		

Population.—There are two hundred and eighty-eight Wasco on the Warm Springs Reservation, Oregon, and one hundred and fifty on the Yakama Reservation, Washington. On the Grande Ronde Reservation, Oregon, there are fifty-nine Clackama. From information derived from Indians by Mr. Thomas Priestly, United States Indian Agent at Yakama, it is learned that there still remain three or four families of "regular Chinook Indians," probably belonging to one of the down-river tribes, about 6 miles above the mouth of the Columbia. Two of these speak the Chinook proper, and three have an imperfect command of Clatsop. There are eight or ten families, probably also of one of the lower river tribes, living near Freeport, Washington.

Some of the Watlala, or Upper Chinook, live near the Cascades, about 55 miles below The Dalles. There thus remain probably between five and six hundred of the Indians of this family.

CHITIMACHAN FAMILY.

= Chitimachas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 114, 117, 1836. Prichard, Phys. Hist. Mankind, v, 407, 1847.

= Chetimachas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 306, 1836. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 1848. Latham, Nat. Hist. Man, 341, 1850. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853.

= Chetimacha, Latham in Proc. Philolog. Soc. Lond., II, 31-50, 1846. Latham, Opuscula, 293, 1860.

= Chetemachas, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848 (same as Chitimachas).

= Shetimasha, Gatschet, Creek Mig. Legend, I, 44, 1884. Gatschet in Science, 414, April 29, 1887.

Derivation: From Choctaw words. tchúti, "cooking vessels," másha, "they possess," (Gatschet).

This family was based upon the language of the tribe of the same name, "formerly living in the vicinity of Lake Barataria, and still existing (1836) in lower Louisiana."

Du Pratz asserted that the Taensa and Chitimacha were kindred tribes of the Na'htchi. A vocabulary of the Shetimasha, however, revealed to Gallatin no traces of such affinity. He considered both

to represent distinct families, a conclusion subsequent investigations have sustained.

In 1881 Mr. Gatschet visited the remnants of this tribe in Louisiana. He found about fifty individuals, a portion of whom lived on Grand River, but the larger part in Charenton, St. Mary's Parish. The tribal organization was abandoned in 1879 on the death of their chief.

CHUMASHAN FAMILY.

> Santa Barbara, Latham in Trans. Philolog. Soc., Lond., 85, 1856 (includes Santa Barbara, Santa Inez, San Luis Obispo languages). Buschmann, Spuren der aztek. Sprache, 531, 535, 538, 602, 1859. Latham, Opuscula, 351, 1860. Powell in Cont. N. A. Eth., III, 550, 567, 1877 (Kasuá, Santa Inez, Id. of Santa Cruz, Santa Barbara). Gatschet in U. S. Geog. Surv. W. 100th M., VII, 419, 1879 (cites La Purísima, Santa Inez, Santa Barbara, Kasuá, Mugu, Santa Cruz Id.).

× Santa Barbara, Gatschet in Mag. Am. Hist., 156, 1877 (Santa Inez, Santa Barbara, Santa Cruz Id., San Luis Obispo, San Antonio).

Derivation: From Chumash, the name of the Santa Rosa Islanders.

The several dialects of this family have long been known under the group or family name, "Santa Barbara," which seems first to have been used in a comprehensive sense by Latham in 1856, who included under it three languages, viz: Santa Barbara, Santa Inez, and San Luis Obispo. The term has no special pertinence as a family designation, except from the fact that the Santa Barbara Mission, around which one of the dialects of the family was spoken, is perhaps more widely known than any of the others. Nevertheless, as it is the family name first applied to the group and has, moreover, passed into current use its claim to recognition would not be questioned were it not a compound name. Under the rule adopted the latter fact necessitates its rejection. As a suitable substitute the term Chumashan is here adopted. Chumash is the name of the Santa Rosa Islanders, who spoke a dialect of this stock, and is a term widely known among the Indians of this family.

The Indians of this family lived in villages, the villages as a whole apparently having no political connection, and hence there appears to have been no appellation in use among them to designate themselves as a whole people.

Dialects of this language were spoken at the Missions of San Buenaventura, Santa Barbara, Santa Iñez, Purísima, and San Luis Obispo. Kindred dialects were spoken also upon the Islands of Santa Rosa and Santa Cruz, and also, probably, upon such other of the Santa Barbara Islands as formerly were permanently inhabited.

These dialects collectively form a remarkably homogeneous family, all of them, with the exception of the San Luis Obispo, being closely related and containing very many words in common. Vocabularies representing six dialects of the language are in possession of the Bureau of Ethnology.

The inland limits of this family can not be exactly defined, although a list of more than one hundred villages with their sites, obtained by Mr. Henshaw in 1884, shows that the tribes were essentially maritime and were closely confined to the coast.

Population.—In 1884 Mr. Henshaw visited the several counties formerly inhabited by the populous tribes of this family and discovered that about forty men, women, and children survived. The adults still speak their old language when conversing with each other, though on other occasions they use Spanish. The largest settlement is at San Buenaventura, where perhaps 20 individuals live near the outskirts of the town.

COAHUILTECAN FAMILY.

= Coahuilteco, Orozco y Berra, Geografía de las Lenguas de México, map, 1864.
= Tejano ó Coahuilteco, Pimentel, Cuadro Descriptivo y Comparativo de las Lenguas Indígenas de México, II, 409, 1865. (A preliminary notice with example from the language derived from Garcia's Manual, 1760.)

Derivation: From the name of the Mexican State Coahuila.

This family appears to have included numerous tribes in southwestern Texas and in Mexico. They are chiefly known through the record of the Rev. Father Bartolomé Garcia (Manual para administrar, etc.), published in 1760. In the preface to the "Manual" he enumerates the tribes and sets forth some phonetic and grammatic differences between the dialects.

On page 63 of his Geografía de las Lenguas de México, 1864, Orozco y Berra gives a list of the languages of Mexico and includes Coahuilteco, indicating it as the language of Coahuila, Nuevo Leon, and Tamaulipas. He does not, however, indicate its extension into Texas. It would thus seem that he intended the name as a general designation for the language of all the cognate tribes.

Upon his colored ethnographic map, also, Orozco y Berra designates the Mexican portion of the area formerly occupied by the tribes of this family Coahuilteco.[1] In his statement that the language and tribes are extinct this author was mistaken, as a few Indians still survive who speak one of the dialects of this family, and in 1886 Mr. Gatschet collected vocabularies of two tribes, the Comecrudo and Cotoname, who live on the Rio Grande, at Las Prietas, State of Tamaulipas. Of the Comecrudo some twenty-five still remain, of whom seven speak the language.

The Cotoname are practically extinct, although Mr. Gatschet obtained one hundred and twenty-five words from a man said to be of this blood. Besides the above, Mr. Gatschet obtained information of the existence of two women of the Pinto or Pakawá tribe who live at La Volsa, near Reynosa, Tamaulipas, on the Rio Grande, and who are said to speak their own language.

[1] Geografía de las Lenguas de México, map, 1864.

PRINCIPAL TRIBES.

Alasapa.	Miakan.	Pastancoya.
Cachopostate.	Orejone.	Patacale.
Casa chiquita.	Pacuâche.	Pausane.
Chayopine.	Pajalate.	Payseya.
Comecrudo.	Pakawá.	Sanipao.
Cotoname.	Pamaque.	Tâcame.
Mano de perro.	Pampopa.	Venado.
Mescal.		

COPEHAN FAMILY.

> Cop-eh, Gibbs in Schoolcraft, Ind. Tribes, III, 421, 1853 (mentioned as a dialect).

= Copeh, Latham in Trans. Philolog. Soc., Lond., 79, 1856 (of Upper Sacramento; cites vocabs. from Gallatin and Schoolcraft). Latham, Opuscula, 345, 1860. Latham, El. Comp. Phil., 412, 1862.

= Wintoons, Powers in Overland Monthly, 530, June, 1874 (Upper Sacramento and Upper Trinity). Gatschet in Mag. Am. Hist., 160, 1877 (defines habitat and names tribes). Gatschet in Beach, Ind. Miscellany, 434, 1877.

= Win-tún, Powell in Cont. N. A. Eth., III, 518–534, 1877 (vocabularies of Wintun, Sacramento River, Trinity Indians). Gatschet in U. S. Geog. Surv. W. 100th M., VII, 418, 1879 (defines area occupied by family).

× Klamath, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 475, 1878 (cited as including Copahs, Patawats, Wintoons). Bancroft, Nat. Races, III, 565, 1882 (contains Copah).

> Napa, Keane, ibid., 476, 524, 1878 (includes Myacomas, Calayomanes, Caymus, Ulucas, Suscols). Bancroft, Nat. Races, III, 567, 1882 (includes Napa, Myacoma, Calayomane, Caymus, Uluca, Suscol).

This name was proposed by Latham with evident hesitation. He says of it: "How far this will eventually turn out to be a convenient name for the group (or how far the group itself will be real), is uncertain." Under it he places two vocabularies, one from the Upper Sacramento and the other from Mag Redings in Shasta County. The head of Putos Creek is given as headquarters for the language. Recent investigations have served to fully confirm the validity of the family.

GEOGRAPHIC DISTRIBUTION.

The territory of the Copehan family is bounded on the north by Mount Shasta and the territory of the Sastean and Lutuamian families, on the east by the territory of the Palaihnihan, Yanan, and Pujunan families, and on the south by the bays of San Pablo and Suisun and the lower waters of the Sacramento.

The eastern boundary of the territory begins about 5 miles east of Mount Shasta, crosses Pit River a little east of Squaw Creek, and reaches to within 10 miles of the eastern bank of the Sacramento at Redding. From Redding to Chico Creek the boundary is about 10 miles east of the Sacramento. From Chico downward the Pujunan family encroaches till at the mouth of Feather River it occupies

the eastern bank of the Sacramento. The western boundary of the Copehan family begins at the northernmost point of San Pablo Bay, trends to the northwest in a somewhat irregular line till it reaches John's Peak, from which point it follows the Coast Range to the upper waters of Cottonwood Creek, whence it deflects to the west, crossing the headwaters of the Trinity and ending at the southern boundary of the Sastean family.

PRINCIPAL TRIBES.

A. Patwin:	Napa.	B. Wintu:
Chenposel.	Olelato.	Daupom.
Guilito.	Olposel.	Nomlaki.
Korusi.	Suisun.	Nommuk.
Liwaito.	Todetabi.	Norelmuk.
Lolsel.	Topaidisel.	Normuk.
Makhelchel.	Waikosel.	Waikenmuk.
Malaka.	Wailaksel.	Wailaki.

COSTANOAN FAMILY.

= Costano, Latham in Trans. Philolog. Soc. Lond., 82, 1856 (includes the Ahwastes, Olhones or Costanos, Romonans, Tulomos, Altatmos). Latham, Opuscula, 348, 1860.

< Mutsun, Gatschet in Mag. Am. Hist., 157, 1877 (includes Ahwastes, Olhones, Altahmos, Romonans, Tulomos). Powell in Cont. N. A. Eth., III, 535, 1877 (includes under this family vocabs. of Costano, Mūtsūn, Santa Clara, Santa Cruz).

Derivation: From the Spanish costano, "coast-men."

Under this group name Latham included five tribes, given above, which were under the supervision of the Mission Dolores. He gives a few words of the Romonan language, comparing it with Tshokoyem which he finds to differ markedly. He finally expresses the opinion that, notwithstanding the resemblance of a few words, notably personal pronouns, to Tshokoyem of the Moquelumnan group, the affinities of the dialects of the Costano are with the Salinas group, with which, however, he does not unite it but prefers to keep it by itself. Later, in 1877, Mr. Gatschet,[1] under the family name Mutsun, united the Costano dialects with the ones classified by Latham under Moquelumnan. This arrangement was followed by Powell in his classification of vocabularies.[2] More recent comparison of all the published material by Mr. Curtin, of the Bureau, revealed very decided and apparently radical differences between the two groups of dialects. In 1888 Mr. H. W. Henshaw visited the coast to the north and south of San Francisco, and obtained a considerable body of linguistic material for further comparison. The result seems fully to justify the separation of the two groups as distinct families.

[1] Mag. Am. Hist., 1877, p. 157.

[2] Cont. N. A. Eth., 1877, vol. 3, p. 535.

GEOGRAPHIC DISTRIBUTION.

The territory of the Costanoan family extends from the Golden Gate to a point near the southern end of Monterey Bay. On the south it is bounded from Monterey Bay to the mountains by the Esselenian territory. On the east side of the mountains it extends to the southern end of Salinas Valley. On the east it is bounded by a somewhat irregular line running from the southern end of Salinas Valley to Gilroy Hot Springs and the upper waters of Conestimba Creek, and northward from the latter points by the San Joaquin River to its mouth. The northern boundary is formed by Suisun Bay, Carquinez Straits, San Pablo and San Francisco Bays, and the Golden Gate.

Population.—The surviving Indians of the once populous tribes of this family are now scattered over several counties and probably do not number, all told, over thirty individuals, as was ascertained by Mr. Henshaw in 1888. Most of these are to be found near the towns of Santa Cruz and Monterey. Only the older individuals speak the language.

ESKIMAUAN FAMILY.

> Eskimaux, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 9, 305, 1836. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Gallatin in Schoolcraft, Ind. Tribes, III, 401, 1853.

= Eskimo, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852. Latham, Nat. Hist. Man, 288, 1850 (general remarks on origin and habitat). Buschmann, Spuren der aztek. Sprache, 689, 1859. Latham, El. Comp. Phil., 385, 1862. Bancroft, Nat. Races, III, 562, 574, 1882.

> Esquimaux, Prichard, Phys. Hist. Mankind, V, 367–371, 1847 (follows Gallatin). Latham in Jour. Eth. Soc. Lond., I, 182–191, 1848. Latham, Opuscula, 266–274, 1860.

> Eskimo, Dall in Proc. Am. Ass., 266, 1869 (treats of Alaskan Eskimo and Tuski only). Berghaus, Physik. Atlas, map 72, 1887 (excludes the Aleutian).

> Eskimos, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 1878 (excludes Aleutian).

> Ounángan, Veniamínoff, Zapíski ob ostrovaχ Unaláshkinskago otdailo, II, 1, 1840 (Aleutians only).

> Ūnŭgŭn, Dall in Cont. N. A. Eth., I, 22, 1877 (Aleuts a division of his Orarian group).

> Unangan, Berghaus, Physik. Atlas, map 72, 1887.

× Northern, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 218, 1841 (includes Ugalentzes of present family).

× Haidah, Scouler, ibid., 224, 1841 (same as his Northern family).

> Ugaljachmutzi, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (lat. 60°, between Prince Williams Sound and Mount St. Elias, perhaps Athapascas).

Aleuten, Holmberg, Ethnog. Skizzen d. Völker Russ. Am., 1855.

> Aleutians, Dall in Proc. Am. Ass., 266, 1869. Dall, Alaska and Resources, 374, 1870 (in both places a division of his Orarian family).

> Aleuts, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 1878 (consist of Unalaskans of mainland and of Fox and Shumagin Ids., with Akkhas of rest of Aleutian Arch.).

> Aleut, Bancroft, Nat. Races, III, 562, 1882 (two dialects, Unalaska and Atkha).

> Konjagen, Holmberg, Ethnograph. Skizzen Völker Russ. Am., 1855 (Island of Koniag or Kadiak).

= Orarians, Dall in Proc. Am. Ass., 265, 1869 (group name; includes Innuit, Aleutians, Tuski). Dall, Alaska and Resources, 374, 1870. Dall in Cont. N. A. Eth., 1, 8, 9, 1877.

× Tinneh, Dall in Proc. Am. Ass., 269, 1869 (includes "Ugalensé").

> Innūit, Dall in Cont. N. A. Eth., 1, 9, 1877 ("Major group" of Orarians: treats of Alaska Innuit only). Berghaus, Physik. Atlas, map 72, 1887 (excludes the Aleutians).

Derivation: From an Algonkin word eskimantik, "eaters of raw flesh."

GEOGRAPHIC DISTRIBUTION.

The geographic boundaries of this family were set forth by Gallatin in 1836 with considerable precision, and require comparatively little revision and correction.

In the linear extent of country occupied, the Eskimauan is the most remarkable of the North American linguistic families. It extends coastwise from eastern Greenland to western Alaska and to the extremity of the Aleutian Islands, a distance of considerably more than 5,000 miles. The winter or permanent villages are usually situated on the coast and are frequently at considerable distances from one another, the intervening areas being usually visited in summer for hunting and fishing purposes. The interior is also visited by the Eskimo for the purpose of hunting reindeer and other animals, though they rarely penetrate farther than 50 miles. A narrow strip along the coast, perhaps 30 miles wide, will probably, on the average, represent Eskimo occupancy.

Except upon the Aleutian Islands, the dialects spoken over this vast area are very similar, the unity of dialect thus observable being in marked contrast to the tendency to change exhibited in other linguistic families of North America.

How far north the east coast of Greenland is inhabited by Eskimo is not at present known. In 1823 Capt. Clavering met with two families of Eskimo north of 74° 30′. Recent explorations (1884–'85) by Capt. Holm, of the Danish Navy, along the southeast coast reveal the presence of Eskimo between 65° and 66° north latitude. These Eskimo profess entire ignorance of any inhabitants north of themselves, which may be taken as proof that if there are fiords farther up the coast which are inhabited there has been no intercommunication in recent times at least between these tribes and those to the south. It seems probable that more or less isolated colonies of Eskimo do actually exist along the east coast of Greenland far to the north.

Along the west coast of Greenland, Eskimo occupancy extends to about 74°. This division is separated by a considerable interval of uninhabited coast from the Etah Eskimo who occupy the coast from Smith Sound to Cape York, their most northerly village being in

78° 18′. For our knowledge of these interesting people we are chiefly indebted to Ross and Bessels.

In Grinnell Land, Gen. Greely found indications of permanent Eskimo habitations near Fort Conger, lat. 81° 44′.

On the coast of Labrador the Eskimo reach as far south as Hamilton Inlet, about 55° 30′. Not long since they extended to the Straits of Belle Isle, 50° 30′.

On the east coast of Hudson Bay the Eskimo reach at present nearly to James Bay. According to Dobbs' in 1744 they extended as far south as east Maine River, or about 52°. The name Notaway (Eskimo) River at the southern end of the bay indicates a former Eskimo extension to that point.

According to Boas and Bessels the most northern Eskimo of the middle group north of Hudson Bay reside on the southern extremity of Ellesmere Land around Jones Sound. Evidences of former occupation of Prince Patrick, Melville, and other of the northern Arctic islands are not lacking, but for some unknown cause, probably a failure of food supply, the Eskimo have migrated thence and the islands are no longer inhabited. In the western part of the central region the coast appears to be uninhabited from the Coppermine River to Cape Bathurst. To the west of the Mackenzie, Herschel Island marks the limit of permanent occupancy by the Mackenzie Eskimo, there being no permanent villages between that island and the settlements at Point Barrow.

The intervening strip of coast is, however, undoubtedly hunted over more or less in summer. The Point Barrow Eskimo do not penetrate far into the interior, but farther to the south the Eskimo reach to the headwaters of the Nunatog and Koyuk Rivers. Only visiting the coast for trading purposes, they occupy an anomalous position among Eskimo.

Eskimo occupancy of the rest of the Alaska coast is practically continuous throughout its whole extent as far to the south and east as the Atna or Copper River, where begin the domains of the Koluschan family. Only in two places do the Indians of the Athapascan family intrude upon Eskimo territory, about Cook's Inlet, and at the mouth of Copper River.

Owing to the labors of Dall, Petroff, Nelson, Turner, Murdoch, and others we are now pretty well informed as to the distribution of the Eskimo in Alaska.

Nothing is said by Gallatin of the Aleutian Islanders and they were probably not considered by him to be Eskimauan. They are now known to belong to this family, though the Aleutian dialects are unintelligible to the Eskimo proper. Their distribution has been entirely changed since the advent of the Russians and the introduction

[1] Dobbs (Arthur). An account of the Countries adjoining to Hudson's Bay. London, 1744.

of the fur trade, and at present they occupy only a very small portion of the islands. Formerly they were much more numerous than at present and extended throughout the chain.

The Eskimauan family is represented in northeast Asia by the Yuit of the Chukchi peninsula, who are to be distinguished from the sedentary Chukchi or the Tuski of authors, the latter being of Asiatic origin. According to Dall the former are comparatively recent arrivals from the American continent, and, like their brethren of America, are confined exclusively to the coast.

PRINCIPAL TRIBES AND VILLAGES.

Greenland group—East Greenland villages:

Akorninak.	Kemisak.	Sermiligak.
Aluik.	Kikkertarsoak.	Sermilik.
Anarnitsok.	Kinarbik.	Taterat.
Angmagsalik.	Maneetsuk.	Umanak.
Igdlolnarsuk.	Narsuk.	Umerik.
Ivimiut.	Okkiosorbik.	

West coast villages:

Akbat.	Karsuit.	Tessuisak.

Labrador group:

Itivimiut.	Suqinimiut.	Taqagmiut.
Kiguaqtagmiut.		

Middle Group:

Aggomiut.	Kangormiut.	Pilingmiut.
Ahaknanelet.	Kinnepatu.	Sagdlirmiut.
Aivillirmiut.	Kramalit.	Sikosuilarmiut.
Akudliarmiut.	Nageuktormiut.	Sinimiut.
Akudnirmiut.	Netchillirmiut.	Ugjulirmiut.
Amitormiut.	Nugumiut.	Ukusiksalingmiut.
Iglulingmiut.	Okomiut.	

Alaska group:

Chiglit.	Kittegareut.	Nushagagmiut.
Chugachigmiut.	Kopagmiut.	Nuwungmiut.
Ikogmiut.	Kuagmiut.	Oglemiut.
Imahklimiut.	Kuskwogmiut.	Selawigmiut.
Inguhklimiut.	Magemiut.	Shiwokugmiut.
Kaialigmiut.	Mahlemiut.	Ukivokgmiut.
Kangmaligmiut.	Nunatogmiut.	Unaligmiut.
Kaviagmiut.	Nunivagmiut.	

Aleutian group:

Atka.	Unalashka.

Asiatic group:

Yuit.

Population.—Only a rough approximation of the population of the Eskimo can be given, since of some of the divisions next to

nothing is known. Dall compiles the following estimates of the Alaskan Eskimo from the most reliable figures up to 1885: Of the Northwestern Innuit 3,100 (?), including the Kopagmiut, Kangmaligmiut, Nuwukmiut, Nunatogmiut, Kuagmiut, the Inguhklimiut of Little Diomede Island 40 (?), Shiwokugmiut of St. Lawrence Island 150 (?), the Western Innuit 14,500 (?), the Aleutian Islanders (Ununguu) 2,200 (?); total of the Alaskan Innuit, about 20,000.

The Central or Baffin Land Eskimo are estimated by Boas to number about 1,100.[1]

From figures given by Rink, Packard, and others, the total number of Labrador Eskimo is believed to be about 2,000.

According to Holm (1884–'85) there are about 550 Eskimo on the east coast of Greenland. On the west coast the mission Eskimo numbered 10,122 in 1886, while the northern Greenland Eskimo, the Arctic Highlanders of Ross, number about 200.

Thus throughout the Arctic regions generally there is a total of about 34,000.

ESSELENIAN FAMILY.

< Salinas, Latham in Trans. Philolog. Soc. Lond., 85, 1856 (includes Gioloco?, Ruslen, Soledad, Eslen, Carmel, San Antonio, and San Miguel, cited as including Eslen). Latham, Opuscula, 350, 1860.

As afterwards mentioned under the Salinan family, the present family was included by Latham in the heterogeneous group called by him Salinas. For reasons there given the term Salinan was restricted to the San Antonio and San Miguel languages, leaving the present family without a name. It is called Esselenian, from the name of the single tribe Esselen, of which it is composed.

Its history is a curious and interesting one. Apparently the first mention of the tribe and language is to be found in the Voyage de la Pérouse, Paris, 1797, page 288, where Lamanon (1786) states that the language of the Ecclemachs (Esselen) differs "absolutely from all those of their neighbors." He gives a vocabulary of twenty-two words and by way of comparison a list of the ten numerals of the Achastlians (Costanoan family). It was a study of the former short vocabulary, published by Taylor in the California Farmer, October 24, 1862, that first led to the supposition of the distinctness of this language.

A few years later the Esselen people came under the observation of Galiano,[2] who mentions the Eslen and Runsien as two distinct nations, and notes a variety of differences in usages and customs which are of no great weight. It is of interest to note, however, that this author also appears to have observed essential differences

[1] Sixth Ann. Rep. Bu. Eth., 426, 1888.

[2] Relacion del viage hecho por las Goletas Sutil y Mexicana en el año de 1792. Madrid, 1802, p. 172.

in the languages of the two peoples, concerning which he says: "The same difference as in usage and custom is observed in the languages of the two nations, as will be perceived from the following comparison with which we will conclude this chapter."

Galiano supplies Esselen and Runsien vocabularies of thirty-one words, most of which agree with the earlier vocabulary of Lamanon. These were published by Taylor in the California Farmer under date of April 20, 1860.

In the fall of 1888 Mr. H. W. Henshaw visited the vicinity of Monterey with the hope of discovering survivors of these Indians. Two women were found in the Salinas Valley to the south who claimed to be of Esselen blood, but neither of them was able to recall any of the language, both having learned in early life to speak the Runsien language in place of their own. An old woman was found in the Carmelo Valley near Monterey and an old man living near the town of Cayucos, who, though of Runsien birth, remembered considerable of the language of their neighbors with whom they were connected by marriage. From them a vocabulary of one hundred and ten words and sixty-eight phrases and short sentences were obtained. These serve to establish the general correctness of the short lists of words collected so long ago by Lamanon and Galiano, and they also prove beyond reasonable doubt that the Esselen language forms a family by itself and has no connection with any other known.

The tribe or tribes composing this family occupied a narrow strip of the California coast from Monterey Bay south to the vicinity of the Santa Lucia Mountain, a distance of about 50 miles.

IROQUOIAN FAMILY.

> Iroquois, Gallatin in Trans. Am. Antiq. Soc., II, 21, 23, 305, 1836 (excludes Cherokee). Prichard, Phys. Hist. Mankind, v, 381, 1847 (follows Gallatin). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848 (as in 1836). Gallatin in Schoolcraft, Ind. Tribes, III, 401, 1853. Latham in Trans. Philolog. Soc. Lond., 58, 1856. Latham, Opuscula, 327, 1860. Latham, Elements Comp. Phil., 463, 1862.

> Irokesen, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

× Irokesen, Berghaus, Physik. Atlas, map 72, 1887 (includes Kataba and said to be derived from Dakota).

> Huron-Iroquois, Bancroft, Hist. U. S., III, 243, 1840.

> Wyandot-Iroquois, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 468, 1878.

> Cherokees, Gallatin in Am. Antiq. Soc., II, 89, 306, 1836 (kept apart from Iroquois though probable affinity asserted). Bancroft, Hist. U. S., III, 246, 1840. Prichard, Phys. Hist. Mankind, v, 401, 1847. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Latham in Trans. Philolog. Soc. Lond., 58, 1856 (a separate group perhaps to be classed with Iroquois and Sioux). Gallatin in Schoolcraft, Ind. Tribes, III, 401, 1853. Latham, Opuscula, 327, 1860. Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 472, 1878 (same as Chelekees or Tsalagi — "apparently entirely distinct from all other American tongues").

> Tschirokies, Berghaus (1845), Physik. Atlas, map 17, 1848.

> Chelekees, Keane, App. Stanford's Comp. (Cent. and So. Am.), 472, 1878 (or Cherokees).

> Cheroki, Gatschet, Creek Mig. Legend, I, 24, 1884. Gatschet in Science, 413, April 29, 1887.

= Huron-Cherokee, Hale in Am. Antiq., 20, Jan., 1883 (proposed as a family name instead of Huron-Iroquois; relationship to Iroquois affirmed).

Derivation: French adaptation of the Iroquois word hiro, used to conclude a speech, and koué, an exclamation (Charlevoix). Hale gives as possible derivations ierokwa, the indeterminate form of the verb to smoke, signifying "they who smoke;" also the Cayuga form of bear, iakwai.[1] Mr. Hewitt[2] suggests the Algonkin words irin, true, or real; ako, snake; with the French termination ois, the word becomes Irinakois.

With reference to this family it is of interest to note that as early as 1798 Barton[3] compared the Cheroki language with that of the Iroquois and stated his belief that there was a connection between them. Gallatin, in the Archæologia Americana, refers to the opinion expressed by Barton, and although he states that he is inclined to agree with that author, yet he does not formally refer Cheroki to that family, concluding that "We have not a sufficient knowledge of the grammar, and generally of the language of the Five Nations, or of the Wyandots, to decide that question."[4]

Mr. Hale was the first to give formal expression to his belief in the affinity of the Cheroki to Iroquois.[5] Recently extensive Cheroki vocabularies have come into possession of the Bureau of Ethnology, and a careful comparison of them with ample Iroquois material has been made by Mr. Hewitt. The result is convincing proof of the relationship of the two languages as affirmed by Barton so long ago.

GEOGRAPHIC DISTRIBUTION.

Unlike most linguistic stocks, the Iroquoian tribes did not occupy a continuous area, but when first known to Europeans were settled in three distinct regions, separated from each other by tribes of other lineage. The northern group was surrounded by tribes of Algonquian stock, while the more southern groups bordered upon the Catawba and Maskoki.

A tradition of the Iroquois points to the St. Lawrence region as the early home of the Iroquoian tribes, whence they gradually moved down to the southwest along the shores of the Great Lakes.

When Cartier, in 1534, first explored the bays and inlets of the Gulf of St. Lawrence he met a Huron-Iroquoian people on the shores of the Bay of Gaspé, who also visited the northern coast of the gulf. In the following year when he sailed up the St. Lawrence River he

[1] Iroquois Book of Rites, 1883, app., p. 173.

[2] American Anthropologist, 1888, vol. 1, p. 188.

[3] New Views of the Origin of the Tribes and Nations of America. Phila., 1798.

[4] Trans. Am. Antiq. Soc., 1836, vol. 2, p. 92.

[5] Am. Antiq., 1883, vol. 5, p. 20.

found the banks of the river from Quebec to Montreal occupied by an Iroquoian people. From statements of Champlain and other early explorers it seems probable that the Wyandot once occupied the country along the northern shore of Lake Ontario.

The Conestoga, and perhaps some allied tribes, occupied the country about the Lower Susquehanna, in Pennsylvania and Maryland, and have commonly been regarded as an isolated body, but it seems probable that their territory was contiguous to that of the Five Nations on the north before the Delaware began their westward movement.

As the Cherokee were the principal tribe on the borders of the southern colonies and occupied the leading place in all the treaty negotiations, they came to be considered as the owners of a large territory to which they had no real claim. Their first sale, in 1721, embraced a tract in South Carolina, between the Congaree and the South Fork of the Edisto,[1] but about one-half of this tract, forming the present Lexington County, belonging to the Congaree.[2] In 1755 they sold a second tract above the first and extending across South Carolina from the Savannah to the Catawba (or Wateree),[3] but all of this tract east of Broad River belonged to other tribes. The lower part, between the Congaree and the Wateree, had been sold 20 years before, and in the upper part the Broad River was acknowledged as the western Catawba boundary.[4] In 1770 they sold a tract, principally in Virginia and West Virginia, bounded east by the Great Kanawha,[5] but the Iroquois claimed by conquest all of this tract northwest of the main ridge of the Alleghany and Cumberland Mountains, and extending at least to the Kentucky River,[6] and two years previously they had made a treaty with Sir William Johnson by which they were recognized as the owners of all between Cumberland Mountains and the Ohio down to the Tennessee.[7] The Cumberland River basin was the only part of this tract to which the Cherokee had any real title, having driven out the former occupants, the Shawnee, about 1721.[8] The Cherokee had no villages north of the Tennessee (this probably includes the Holston as its upper part), and at a conference at Albany the Cherokee delegates presented to the Iroquois the skin of a deer, which they said belonged to the Iroquois, as the animal had been killed north of the Tennessee.[9] In 1805, 1806, and 1817 they sold several tracts, mainly in

[1] Cession No. 1, on Royce's Cherokee map, 1884.
[2] Howe in Schoolcraft, Ind. Tribes, 1854, vol. 4, p. 163.
[3] Cession 2, on Royce's Cherokee map, 1884.
[4] Howe in Schoolcraft, Ind. Tribes, 1854, vol. 4, pp. 155–159.
[5] Cession 4, on Royce's Cherokee map, 1884.
[6] Sir William Johnson in Parkman's Conspiracy of Pontiac, app.
[7] Bancroft, Hist. U. S.
[8] Ramsey, Annals of Tennessee, 1853.
[9] Ramsey, Annals of Tennessee, 1853.

middle Tennessee, north of the Tennessee River and extending to the Cumberland River watershed, but this territory was claimed and had been occupied by the Chickasaw, and at one conference the Cherokee admitted their claim.[1] The adjacent tract in northern Alabama and Georgia, on the headwaters of the Coosa, was not permanently occupied by the Cherokee until they began to move westward, about 1770.

The whole region of West Virginia, Kentucky, and the Cumberland River region of Tennessee was claimed by the Iroquois and Cherokee, but the Iroquois never occupied any of it and the Cherokee could not be said to occupy any beyond the Cumberland Mountains. The Cumberland River was originally held by the Shawnee, and the rest was occupied, so far as it was occupied at all, by the Shawnee, Delaware, and occasionally by the Wyandot and Mingo (Iroquoian), who made regular excursions southward across the Ohio every year to hunt and to make salt at the licks. Most of the temporary camps or villages in Kentucky and West Virginia were built by the Shawnee and Delaware. The Shawnee and Delaware were the principal barrier to the settlement of Kentucky and West Virginia for a period of 20 years, while in all that time neither the Cherokee nor the Iroquois offered any resistance or checked the opposition of the Ohio tribes.

The Cherokee bounds in Virginia should be extended along the mountain region as far at least as the James River, as they claim to have lived at the Peaks of Otter,[2] and seem to be identical with the Rickohockan or Rechahecrian of the early Virginia writers, who lived in the mountains beyond the Monacan, and in 1656 ravaged the lowland country as far as the site of Richmond and defeated the English and the Powhatan Indians in a pitched battle at that place.[3]

The language of the Tuscarora, formerly of northeastern North Carolina, connect them directly with the northern Iroquois. The Chowanoc and Nottoway and other cognate tribes adjoining the Tuscarora may have been offshoots from that tribe.

PRINCIPAL TRIBES.

Cayuga.	Neuter.	Seneca.
Cherokee.	Nottoway.	Tionontate.
Conestoga.	Oneida.	Tuscarora.
Erie.	Onondaga.	Wyandot.
Mohawk.		

Population.—The present number of the Iroquoian stock is about 43,000, of whom over 34,000 (including the Cherokees) are in the United States while nearly 9,000 are in Canada. Below is given the population of the different tribes, compiled chiefly from the

[1] Blount (1792) in Am. State Papers, 1832, vol. 4, p. 326.

[2] Schoolcraft, Notes on Iroquois, 1847.

[3] Bancroft, Hist. U. S.

Canadian Indian Report for 1888, and the United States Census Bulletin for 1890:

Cherokee:	
Cherokee and Choctaw Nations, Indian Territory (exclusive of adopted Indians, negroes, and whites)	25,557
Eastern Band, Qualla Reservation, Cheowah, etc., North Carolina (exclusive of those practically white)	1,500?
Lawrence school, Kansas	6
	27,063?
Caughnawaga:	
Caughnawaga, Quebec	1,673
Cayuga:	
Grand River, Ontario	972?
With Seneca, Quapaw Agency, Indian Territory (total 255)	128?
Cattaraugus Reserve, New York	165
Other Reserves in New York	36
	1,301?
"Iroquois":	
Of Lake of Two Mountains, Quebec, mainly Mohawk (with Algonquin)	345
With Algonquin at Gibson, Ontario (total 131)	31?
	376?
Mohawk:	
Quinte Bay, Ontario	1,050
Grand River, Ontario	1,302
Tonawanda, Onondaga, and Cattaraugus Reserves, New York	6
	2,358
Oneida:	
Oneida and other Reserves, New York	295
Green Bay Agency, Wisconsin ("including homeless Indians")	1,716
Carlisle and Hampton schools	104
Thames River, Ontario	778
Grand River, Ontario	236
	3,129
Onondaga:	
Onondaga Reserve, New York	380
Allegany Reserve, New York	77
Cattaraugus Reserve, New York	38
Tuscarora (41) and Tonawanda (4) Reserves, New York	45
Carlisle and Hampton schools	4
Grand River, Ontario	346
	890
Seneca:	
With Cayuga, Quapaw Agency, Indian Territory (total 255)	127?
Allegany Reserve, New York	862
Cattaraugus Reserve, New York	1,318
Tonawanda Reserve, New York	517
Tuscarora and Onondaga Reserves, New York	12
Lawrence, Hampton, and Carlisle schools	13
Grand River, Ontario	206
	3,055?

St. Regis:	
St. Regis Reserve, New York	1,053
Onondaga and other Reserves, New York	17
St. Regis Reserve, Quebec	1,179
	2,249
Tuscarora:	
Tuscarora Reserve, New York	398
Cattaraugus and Tonawanda Reserves, New York	6
Grand River, Ontario	329
	733
Wyandot:	
Quapaw Agency, Indian Territory	288
Lawrence, Hampton, and Carlisle schools	18
"Hurons" of Lorette, Quebec	279
"Wyandots" of Anderdon, Ontario	98
	683

The Iroquois of St. Regis, Caughnawaga, Lake of Two Mountains (Oka), and Gibson speak a dialect mainly Mohawk and Oneida, but are a mixture of all the tribes of the original Five Nations.

KALAPOOIAN FAMILY.

= Kalapooiah, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 225, 1841 (includes Kalapooiah and Yamkallie; thinks the Umpqua and Cathlascon languages are related). Buschmann, Spuren der aztek. Sprache, 599, 617, 1859, (follows Scouler).

= Kalapuya, Hale in U. S. Expl. Exp., VI, 217, 564, 1846 (of Willamet Valley above Falls). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 17, 77, 1848. Berghaus (1851), Physik. Atlas, map 17, 1852. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853. Latham in Trans. Philolog. Soc. Lond., 73, 1856. Buschmann, Spuren der aztek. Sprache, 617, 1859. Latham, Opuscula, 340, 1860. Gatschet in Mag. Am. Hist., 167, 1877. Gatschet in Beach, Ind. Misc., 442, 1877.

> Calapooya, Bancroft, Nat. Races, III, 565, 629, 1882.

× Chinooks, Keane, App. Stanford's Comp. (Cent. and So. Am.), 474, 1878 (includes Calapooyas and Yamkally).

> Yamkally, Bancroft, Nat. Races, III, 565, 630, 1882 (bears a certain relationship to Calapooya).

Under this family name Scouler places two tribes, the Kalapooiah, inhabiting "the fertile Willamat plains" and the Yamkallie, who live "more in the interior, to ards the sources of the Willamat River." Scouler adds that the Umpqua "appear to belong to this Family, although their language is rather more remote from the Kalapooiah than the Yamkallie is." The Umpqua language is now placed under the Athapascan family. Scouler also asserts the intimate relationship of the Cathlascon tribes to the Kalapooiah family. They are now classed as Chinookan.

The tribes of the Kalapooian family inhabited the valley of Willamette River, Oregon, above the falls, and extended well up to the

headwaters of that stream. They appear not to have reached the Columbia River, being cut off by tribes of the Chinookan family, and consequently were not met by Lewis and Clarke, whose statements of their habitat were derived solely from natives.

PRINCIPAL TRIBES

Ahántchuyuk (Pudding River Indians).	Calapooya.	Yámil.
	Chelamela.	Yonkalla (Ayankēld).
	Lákmiut.	
Atfálati.	Santiam.	

Population.—So far as known the surviving Indians of this family are all at the Grande Ronde Agency, Oregon.

The following is a census for 1890:

Atfálati	28	Santiam	27
Calapooya	22	Yámil	30
Lákmiut	29	Yonkalla	7
Mary's River	28		
		Total	171

KARANKAWAN FAMILY.

=Karánkawa, Gatschet in Globus, XLIX, No. 8, 123, 1886 (vocabulary of 25 terms; distinguished as a family provisionally). Gatschet in Science, 414, April 9, 1887.

The Karankawa formerly dwelt upon the Texan coast, according to Sibley, upon an island or peninsula in the Bay of St. Bernard (Matagorda Bay). In 1804 this author, upon hearsay evidence, stated their number to be 500 men.[1] In several places in the paper cited it is explicitly stated that the Karankawa spoke the Attakapa language; the Attakapa was a coast tribe living to the east of them. In 1884 Mr. Gatschet found a Tonkawe at Fort Griffin, Texas, who claimed to have formerly lived among the Karankawa. From him a vocabulary of twenty-five terms was obtained, which was all of the language he remembered.

The vocabulary is unsatisfactory, not only because of its meagerness, but because most of the terms are unimportant for comparison. Nevertheless, such as it is, it represents all of the language that is extant. Judged by this vocabulary the language seems to be distinct not only from the Attakapa but from all others. Unsatisfactory as the linguistic evidence is, it appears to be safer to class the language provisionally as a distinct family upon the strength of it than to accept Sibley's statement of its identity with Attakapa, especially as we know nothing of the extent of his information or whether indeed his statement was based upon a personal knowledge of the language.

[1] Am. State Papers, 1832, vol. 4, p. 722.

A careful search has been made with the hope of finding a few survivors of this family, but thus far not a single descendant of the tribe has been discovered and it is probable that not one is now living.

KERESAN FAMILY.

> Keres, Turner in Pac. R. R. Rep., III, pt. 3, 55, 86–90, 1856 (includes Kiwomi, Cochitemi, Acoma).

= Kera, Powell in Rocky Mt. Presbyterian, Nov., 1878 (includes San Felipe, Santo Domingo, Cóchiti, Santa Afia, Cia, Acoma, Laguna, Povate, Hasatch, Mogino). Gatschet in U. S. Geog. Surv. W. 100th M., VII, 417, 1879. Gatschet in Mag. Am. Hist. 259, 1882.

= Kéran, Powell in Am. Nat., 604, Aug., 1880 (enumerates pueblos and gives linguistic literature).

= Queres, Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878.

= Chu-cha-cas, Lane in Schoolcraft, Ind. Tribes, v, 689, 1855 (includes Laguna, Acoma, Santo Domingo, San Felipe, Santa Ana, Cochite, Sille).

= Chu-cha-chas, Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878 (misprint; follows Lane).

= Kes-whaw-hay, Lane in Schoolcraft, Ind. Tribes, v, 689, 1855 (same as Chu-cha-cas above). Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878 (follows Lane).

Derivation unknown. The name is pronounced with an explosive initial sound, and Ad. F. Bandelier spells it Qq'uêres, Quéra, Quéris.

Under this name Turner, as above quoted, includes the vocabularies of Kiwomi, Cochitemi, and Acoma.

The full list of pueblos of Keresan stock is given below. They are situated in New Mexico on the upper Rio Grande, on several of its small western affluents, and on the Jemez and San José, which also are tributaries of the Rio Grande.

VILLAGES.

Acoma.	Pueblito.[1]	Santo Domingo.
Acomita.[1]	Punyeestye.	Seemunah.
Cochití.	Punyekia.	Sia.
Hasatch.	Pusityitcho.	Wapuchuseamma.
Laguna.	San Felipe.	Ziamma.
Paguate.	Santa Ana.	

Population.—According to the census of 1890 the total population of the villages of the family is 3,560, distributed as follows:

Acoma[2]	566	San Felipe	554
Cochiti	268	Santo Domingo	670
Laguna[3]	1,143	Sia	106
Santa Ana	253		

[1] Summer pueblos only.

[2] Includes Acomita and Pueblito.

[3] Includes Hasatch, Paguate, Punyeestye, Punyekia, Pusityitcho, Seemunah, Wapuchuseamma, and Ziamma.

KIOWAN FAMILY.

=Kiaways. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (on upper waters Arkansas).

=Kioway, Turner in Pac. R. R. Rep., III, pt. 3, 55, 80, 1856 (based on the Kioway (Caigua) tribe only). Buschmann, Spuren der aztek. Sprache, 432, 433, 1859. Latham, El. Comp. Phil., 444, 1862 ("more Paduca than aught else").

=Káyowē, Gatschet in Am. Antiq., 280, Oct., 1882 (gives phonetics of).

Derivation: From the Kiowa word Kó-i, plural Kó-igu, meaning "Káyowē man." The Comanche term káyowē means "rat."

The author who first formally separated this family appears to have been Turner. Gallatin mentions the tribe and remarks that owing to the loss of Dr. Say's vocabularies "we only know that both the Kiowas and Kaskaias languages were harsh, guttural, and extremely difficult."[1] Turner, upon the strength of a vocabulary furnished by Lieut. Whipple, dissents from the opinion expressed by Pike and others to the effect that the language is of the same stock as the Comanche, and, while admitting that its relationship to Camanche is greater than to any other family, thinks that the likeness is merely the result of long intercommunication. His opinion that it is entirely distinct from any other language has been indorsed by Buschmann and other authorities. The family is represented by the Kiowa tribe.

So intimately associated with the Comanches have the Kiowa been since known to history that it is not easy to determine their pristine home. By the Medicine Creek treaty of October 18, 1867, they and the Comanches were assigned their present reservation in the Indian Territory, both resigning all claims to other territory, especially their claims and rights in and to the country north of the Cimarron River and west of the eastern boundary of New Mexico.

The terms of the cession might be taken to indicate a joint ownership of territory, but it is more likely that the Kiowa territory adjoined the Comanche on the northwest. In fact Pope[2] definitely locates the Kiowa in the valley of the Upper Arkansas, and of its tributary, the Purgatory (Las Animas) River. This is in substantial accord with the statements of other writers of about the same period. Schermerhorn (1812) places the Kiowa on the heads of the Arkansas and Platte. Earlier still they appear upon the headwaters of the Platte, which is the region assigned them upon the map.[3] This region was occupied later by the Cheyenne and Arapaho of Algonquian stock.

Population.—According to the United States census for 1890 there are 1,140 Kiowa on the Kiowa, Comanche, and Wichita Reservation, Indian Territory.

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[1] Trans. and Coll. Am. Antiq. Soc., 1836, vol. II, p. 133.

[2] Pac. R. R. Rep., 1855, vol. 2, pt. 3, p. 16.

[3] Pike, Exp. to sources of the Mississippi, App., 1810, pt. 3, p. 9.

KITUNAHAN FAMILY.

= Kitunaha, Hale in U. S. Expl. Exp., VI, 204, 535, 1846 (between the forks of the Columbia). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 10, 77, 1848 (Flatbow). Berghaus (1851), Physik. Atlas, map 17, 1852. Latham in Trans. Philolog. Soc. Lond., 70, 1856. Latham, Opuscula, 338, 1860. Latham, El. Comp. Phil., 395, 1862 (between 52° and 48° N. L., west of main ridge of Rocky Mountains). Gatschet in Mag. Am. Hist., 170, 1877 (on Kootenay River).

= Coutanies, Hale in U. S. Expl. Exp., VI, 204, 1846 (=Kitunaha).

= Kútanis, Latham, Nat. Hist. Man., 316, 1850 (Kitunaha).

= Kituanaha, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (Coutaria or Flatbows, north of lat. 49°).

= Kootanies, Buschmann, Spuren der aztek. Sprache, 661, 1859.

= Kutani, Latham, El. Comp. Phil., 395, 1862 (or Kitunaha).

= Cootanie, Latham, El. Comp. Phil., 395, 1862 (synonymous with Kitunaha).

= Kootenai, Gatschet in Mag. Am. Hist., 170, 1877 (defines area occupied). Gatschet in Beach, Ind. Misc., 446, 1877. Bancroft, Nat. Races, III, 565, 1882.

= Kootenuha, Tolmie and Dawson, Comp. Vocabs., 79–87, 1884 (vocabulary of Upper Kootenuha).

= Flatbow, Hale in U. S. Expl. Exp., VI, 204, 1846 (= Kitunaha). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 10, 77, 1848 (after Hale). Buschmann, Spuren der aztek. Sprache, 661, 1859. Latham, El. Comp. Phil., 395, 1862 (or Kitunaha). Gatschet in Mag. Am. Hist., 170, 1877.

= Flachbogen, Berghaus (1851), Physik. Atlas, map 17, 1852.

× Shushwaps, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 474, 1878 (includes Kootenais (Flatbows or Skalzi).

This family was based upon a tribe variously termed Kitunaha, Kutenay, Cootenai, or Flatbow, living on the Kootenay River, a branch of the Columbia in Oregon.

Mr. Gatschet thinks it is probable that there are two dialects of the language spoken respectively in the extreme northern and southern portions of the territory occupied, but the vocabularies at hand are not sufficient to definitely settle the question.

The area occupied by the Kitunahan tribes is inclosed between the northern fork of the Columbia River, extending on the south along the Cootenay River. By far the greater part of the territory occupied by these tribes is in British Columbia.

TRIBES.

The principal divisions or tribes are Cootenai, or Upper Cootenai; Akoklako, or Lower Cootenai; Klanoh-Klatklam, or Flathead Cootenai; Yaketahnoklatakmakanay, or Tobacco Plains Cootenai.

Population.—There are about 425 Cootenai at Flathead Agency, Montana, and 539 at Kootenay Agency, British Columbia; total, 964.

KOLUSCHAN FAMILY.

= Koluschen, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 14, 1836 (islands and adjacent coast from 60° to 55° N. L.).

= Koulischen, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 306, 1836. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 77, 1848, (Koulischen and Sitka languages). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (Sitka, bet. 52° and 59° lat.).

< Kolooch, Latham in Trans. Philolog. Soc. Lond., II, 31–50, 1846 (tends to merge Kolooch into Esquimaux). Latham in Jour. Eth. Soc. Lond., I, 163, 1848 (compared with Eskimo language.). Latham, Opuscula, 259, 276, 1860.

= Koluschians, Prichard, Phys. Hist. Mankind, V, 433, 1847 (follows Gallatin). Scouler (1846) in Jour. Eth. Soc. Lond., I, 231, 1848.

< Kolúch, Latham, Nat. Hist. Man, 294, 1850 (more likely forms a subdivision of Eskimo than a separate class; includes Kenay of Cook's Inlet, Atna of Copper River, Koltshani, Ugalents, Sitkans, Tungaas, Inkhuluklait, Magimut, Inkalit; Digothi and Nehanni are classed as "doubtful Kolúches").

= Koloschen, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852. Buschmann, Spuren der aztek. Sprache, 680, 1859. Berghaus, Physik. Atlas, map 72, 1887.

= Kolush, Latham, El. Comp. Phil., 401, 1862 (mere mention of family with short vocabulary).

= Kaloshians, Dall in Proc. Am. Ass., 375, 1885 (gives tribes and population).

× Northern, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 218, 1841 (includes Koloshes and Tun Ghasse).

× Haidah, Scouler, ibid, 219, 1841 (same as his Northern).

= Klen-ee-kate, Schoolcraft, Ind. Tribes, V, 489, 1855.

= Klen-e-kate, Kane, Wanderings of an Artist, app., 1859 (a census of N. W. coast tribes classified by language).

= Thlinkithen, Holmberg in Finland Soc., 284, 1856 (fide Buschmann, 676, 1859).

= Thl'nkets, Dall in Proc. Am. Ass., 268, 269, 1869 (divided into Sitka-kwan, Stahkin-kwan, "Yakutats").

= T'linkets, Dall in Cont. N. A. Eth., I, 36, 1877 (divided into Yăk'ūtăts, Chilkāht'-kwān, Sitka-kwan, Stākhin'-kwān, Kygāh'ni).

= Thlinkeet, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 462, 1878 (from Mount St. Elias to Nass River; includes Ugalenzes, Yakutats, Chilkats, Hoodnids, Hoodsinoos, Takoos, Auks, Kakas, Stikines, Eeliknûs, Tungass, Sitkas). Bancroft, Nat. Races, III, 562, 579, 1882.

= Thlinkit, Tolmie and Dawson, Comp. Vocabs., 14, 1884 (vocab. of Skutkwan Sept; also map showing distribution of family). Berghaus, Physik. Atlas, map 72, 1887.

= Tlinkit, Dall in Proc. Am. Ass., 375, 1885 (enumerates tribes and gives population).

Derivation: From the Aleut word kolosh, or more properly, kaluga, meaning "dish," the allusion being to the dish-shaped lip ornaments.

This family was based by Gallatin upon the Koluschen tribe (the Tshinkitani of Marchand), "who inhabit the islands and the adjacent coast from the sixtieth to the fifty-fifth degree of north latitude."

In the Koluschan family, Gallatin observes that the remote analogies to the Mexican tongue to be found in several of the northern tribes, as the Kinai, are more marked than in any other.

The boundaries of this family as given by Gallatin are substantially in accordance with our present knowledge of the subject. The southern boundary is somewhat indeterminate owing to the fact, ascertained by the census agents in 1880, that the Haida tribes extend somewhat farther north than was formerly supposed and occupy the southeast half of Prince of Wales Island. About latitude 56°, or the mouth of Portland Canal, indicates the southern limit of the family, and 60°, or near the mouth of Atna River, the northern limit. Until recently they have been supposed to be exclu-

sively an insular and coast people, but Mr. Dawson has made the interesting discovery[1] that the Tagish, a tribe living inland on the headwaters of the Lewis River, who have hitherto been supposed to be of Athapascan extraction, belong to the Koluschan family. This tribe, therefore, has crossed the coast range of mountains, which for the most part limits the extension of this people inland and confines them to a narrow coast strip, and have gained a permanent foothold in the interior, where they share the habits of the neighboring Athapascan tribes.

TRIBES.

Auk.	Hunah.	Tagish.
Chilcat.	Kek.	Taku.
Hanega.	Sitka.	Tongas.
Hoodsunu.	Stahkin.	Yakutat.

Population.—The following figures are from the census of 1880.[2] The total population of the tribes of this family, exclusive of the Tagish, is 6,437, distributed as follows:

Auk	640	Kek	568
Chilcat	988	Sitka	721
Hanega (including Kouyon and Klanak)	587	Stahkin	317
Hoodsunu	666	Taku	269
Hunah	908	Tongas	273
		Yakutat	500

KULANAPAN FAMILY.

× Kula-napo, Gibbs in Schoolcraft, Ind. Tribes, III, 421, 1853 (the name of one of the Clear Lake bands).

> Mendocino (?), Latham in Trans. Philolog. Soc. Lond., 77, 1856 (name suggested for Choweshak, Batemdaikai, Kulanapo, Yukai, Khwaklamayu languages). Latham, Opuscula, 343, 1860. Latham, El. Comp. Phil., 410, 1862 (as above).

> Pomo, Powers in Overland Monthly, IX, 498, Dec., 1872 (general description of habitat and of family). Powers in Cont. N. A. Eth., III, 146, 1877. Powell, ibid., 491 (vocabularies of Gal-li-no-mé-ro, Yo-kai'-a, Ba-tem-da-kaii, Chau-i-shek, Yu-kai, Ku-la-na-po, H'hana, Venaambakaiia, Ka'-bi-na-pek, Chwachamaju). Gatschet in Mag. Am. Hist., 16, 1877 (gives habitat and enumerates tribes of family). Gatschet in Beach, Ind. Misc., 436, 1877. Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (includes Castel Pomos, Ki, Cahto, Choam, Chadela, Matomey Ki, Usal or Calamet, Shebalne Pomos, Gallinomeros, Sanels, Socoas, Lamas, Comachos).

< Pomo, Bancroft, Nat. Races, III, 566, 1882 (includes Ukiah, Gallinomero, Masallamagoon, Gualala, Matole, Kulanapo, Sanél, Yonios, Choweshak, Batemdakaie, Chocuyem, Olamentke, Kainamare, Chwachamaju. Of these, Chocuyem and Olamentke are Moquelumnan).

The name applied to this family was first employed by Gibbs in 1853, as above cited. He states that it is the "name of one of the

[1] Annual Report of the Geological Survey of Canada, 1887.

[2] Petroff, Report on the Population, Industries, and Resources of Alaska, 1884, p. 33.

Clear Lake bands," adding that "the language is spoken by all the tribes occupying the large valley." The distinctness of the language is now generally admitted.

GEOGRAPHIC DISTRIBUTION.

The main territory of the Kulanapan family is bounded on the west by the Pacific Ocean, on the east by the Yukian and Copehan territories, on the north by the watershed of the Russian River, and on the south by a line drawn from Bodega Head to the southwest corner of the Yukian territory, near Santa Rosa, Sonoma County, California. Several tribes of this family, viz, the Kastel Pomo, Kai Pomo, and Kato Pomo, are located in the valley between the South Fork of Eel River and the main river, and on the headwaters of the South Fork, extending thence in a narrow strip to the ocean. In this situation they were entirely cut off from the main body by the intrusive Yuki tribes, and pressed upon from the north by the warlike Wailakki, who are said to have imposed their language and many of their customs upon them and as well doubtless to have extensively intermarried with them.

TRIBES.

Balló Kaì Pomo, "Oat Valley People."
Batemdikáyi.
Búldam Pomo (Rio Grande or Big River).
Chawishek.
Choam Chadila Pomo (Capello).
Chwachamajù.
Dápishul Pomo (Redwood Cañon).
Eastern People (Clear Lake about Lakeport).
Erío (mouth of Russian River).
Erússi (Fort Ross).
Gallinoméro (Russian River Valley below Cloverdale and in Dry Creek Valley).
Gualála (northwest corner of Sonoma County).
Kabinapek (western part of Clear Lake basin).
Kaimé (above Healdsburgh).
Kai Pomo (between Eel River and South Fork).
Kastel Pomo (between Eel River and South Fork).
Kato Pomo, "Lake People."
Komácho (Anderson and Rancheria Valleys).
Kulá Kai Pomo (Sherwood Valley).
Kulanapo.
Láma (Russian River Valley).
Misálamagūn or Musakakūn (above Healdsburgh).
Mitoám Kai Pomo, "Wooded Valley People" (Little Lake).
Poam Pomo.

TRIBES—continued.

Senel (Russian River Valley).
Shódo Kaí Pomo (Coyote Valley).
Síako (Russian River Valley).
Sokóa (Russian River Valley).
Yokáya Pomo, "Lower Valley People" (Ukiah City).
Yusâl (or Kámalel) Pomo, "Ocean People" (on coast and along Yusal Creek).

KUSAN FAMILY.

= Kúsa, Gatschet in Mag. Am. Hist., 257, 1882.

Derivation: Milhau, in a manuscript letter to Gibbs (Bureau of Ethnology), states that "Coos in the Rogue River dialect is said to mean lake, lagoon or inland bay."

The "Kaus or Kwokwoos" tribe is merely mentioned by Hale as living on a river of the same name between the Umqua and the Clamet.[1] Lewis and Clarke[2] also mention them in the same location as the Cookkoo-oose. The tribe was referred to also under the name Kaus by Latham,[3] who did not attempt its classification, having in fact no material for the purpose.

Mr. Gatschet, as above, distinguishes the language as forming a distinct stock. It is spoken on the coast of middle Oregon, on Coos River and Bay, and at the mouth of Coquille River, Oregon.

TRIBES.

Anasitch.	Mulluk or Lower Coquille.
Melukitz.	Nacu?.

Population.—Most of the survivors of this family are gathered upon the Siletz Reservation, Oregon, but their number can not be stated as the agency returns are not given by tribes.

LUTUAMIAN FAMILY.

= Lutuami, Hale in U. S. Expl. Exp., VI, 199, 569, 1846 (headwaters Klamath River and lake). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 17, 77, 1848 (follows Hale). Latham, Nat. Hist. Man, 325, 1850 (headwaters Clamet River). Berghaus (1851), Physik. Atlas, map 17, 1852. Latham in Proc. Philolog. Soc. Lond., VI, 82, 1854. Latham in Trans. Philolog. Soc. Lond., 74, 1856. Latham, Opuscula, 300, 310, 1860. Latham, El. Comp. Phil., 407, 1862.

= Luturim, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (misprint for Lutuami; based on Clamets language).

= Lutumani, Latham, Opuscula, 341, 1860 (misprint for Lutuami).

= Tlamatl, Hale in U. S. Expl. Exp., VI, 218, 569, 1846 (alternative of Lutuami). Berghaus (1851), Physik. Atlas, map 17, 1852.

= Clamets, Hale in U. S. Expl. Exp., VI, 218, 569, 1846 (alternative of Lutuami).

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[1] U. S. Expl. Exp., 1846, vol. 6, p, 221.
[2] Allen Ed., 1814, vol. 2, p. 118.
[3] Nat. Hist. Man, 1850, p. 325.

= Klamath, Gatschet in Mag. Am. Hist., 164, 1877. Gatschet in Beach. Ind. Misc., 439, 1877. Gatschet in Am. Antiq., 81–84, 1878 (general remarks upon family).

< Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 475, 1878 (a geographic group rather than a linguistic family; includes, in addition to the Klamath proper or Lutuami, the Yacons, Modocs, Copahs, Shastas, Palaiks, Wintoons, Eurocs, Cahrocs, Lototens, Weeyots, Wishosks, Wallies, Tolewahs, Patawats, Yukas, "and others between Eel River and Humboldt Bay." The list thus includes several distinct families). Bancroft, Nat. Races, III, 565, 640, 1882 (includes Lutuami or Klamath, Modoc and Copah, the latter belonging to the Copehan family).

= Klamath Indians of Southwestern Oregon, Gatschet in Cont, N. A. Eth., II, pt. 1, xxxiii, 1890.

Derivation: From a Pit River word meaning "lake."

The tribes of this family appear from time immemorial to have occupied Little and Upper Klamath Lakes, Klamath Marsh, and Sprague River, Oregon. Some of the Modoc have been removed to the Indian Territory, where 84 now reside; others are in Sprague River Valley.

The language is a homogeneous one and, according to Mr. Gatschet who has made a special study of it, has no real dialects, the two divisions of the family, Klamath and Modoc, speaking an almost identical language.

The Klamaths' own name is É-ukshikni, "Klamath Lake people." The Modoc are termed by the Klamath Módokni, "Southern people."

TRIBES.

Klamath. Modoc.

Population.—There were 769 Klamath and Modoc on the Klamaht Reservation in 1889. Since then they have slightly decreased.

MARIPOSAN FAMILY.

> Mariposa, Latham in Trans. Philolog. Soc. Lond., 84, 1856 (Coconoons language, Mariposa County). Latham, Opuscula, 350, 1860. Latham, El. Comp. Philology, 416, 1862 (Coconoons of Mercede River).

= Yo'-kuts, Powers in Cont. N. A. Eth., III, 369, 1877. Powell, ibid., 570 (vocabularies of Yo'-kuts, Wi'-chi-kik, Tin'-lin-neh, King's River, Coconoons, Calaveras County).

= Yocut, Gatschet in Mag. Am. Hist., 158, 1877 (mentions Taches, Chewenee, Watooga, Chookchancies, Coconoons and others). Gatschet in Beach, Ind. Misc., 432, 1877.

Derivation: A Spanish word meaning "butterfly," applied to a county in California and subsequently taken for the family name.

Latham mentions the remnants of three distinct bands of the Coconoon, each with its own language, in the north of Mariposa County. These are classed together under the above name. More recently the tribes speaking languages allied to the Coconūn have been treated of under the family name Yokut. As, however, the stock was established by Latham on a sound basis, his name is here restored.

GEOGRAPHIC DISTRIBUTION.

The territory of the Mariposan family is quite irregular in outline. On the north it is bounded by the Fresno River up to the point of its junction with the San Joaquin; thence by a line running to the northeast corner of the Salinan territory in San Benito County, California; on the west by a line running from San Benito to Mount Pinos. From the middle of the western shore of Tulare Lake to the ridge at Mount Pinos on the south, the Mariposan area is merely a narrow strip in and along the foothills. Occupying one-half of the western and all the southern shore of Tulare Lake, and bounded on the north by a line running from the southeast corner of Tulare Lake due east to the first great spur of the Sierra Nevada range is the territory of the intrusive Shoshoni. On the east the secondary range of the Sierra Nevada forms the Mariposan boundary.

In addition to the above a small strip of territory on the eastern bank of the San Joaquin is occupied by the Cholovone division of the Mariposan family, between the Tuolumne and the point where the San Joaquin turns to the west before entering Suisun Bay.

TRIBES.

Ayapaì (Tule River).
Chainímaini (lower King's River.)
Chukaímina (Squaw Valley).
Chūk'chansi (San Joaquin River above Millerton).
Ćhunut (Kaweah River at the lake).
Coconūn' (Merced River).
Ititcha (King's River).
Kassovo (Day Creek).
Kau-í-a (Kaweah River; foothills).
Kiawétni (Tule River at Porterville).
Mayáyu (Tule River, south fork).
Notoánaiti (on the lake).
Ochíngita (Tule River).
Pitkachì (extinct; San Joaquin River below Millerton).
Pohállin Tinleh (near Kern lake).
Sawákhtu (Tule River, south fork).
Táchi (Kingston).
Télumni (Kaweah River below Visalia).
Tínlinneh (Fort Tejon).
Tisèchu (upper King's River).
Wíchikik (King's River).
Wikchúmni (Kaweah River; foothills).
Wíksachi (upper Kaweah Valley).
Yúkol (Kaweah River plains).

Population.—There are 145 of the Indians of this family now attached to the Mission Agency, California.

MOQUELUMNAN FAMILY.

> Tcho-ko-yem, Gibbs in Schoolcraft, Ind. Tribes, III, 421, 1853 (mentioned as a band and dialect).

> Moquelumne, Latham in Trans. Philolog. Soc. Lond., 81, 1856 (includes Hale's Talatui, Tuolumne from Schoolcraft, Mumaltachi, Mullateco, Apangasi, Lappu, Siyante or Typoxi, Hawhaw's band of Aplaches, San Rafael vocabulary, Tshokoyem vobabulary, Cocouyem and Yonkiousme Paternosters, Olamentke of Kostromitonov, Paternosters for Mission de Santa Clara and the Vallee de los Tulares of Mofras, Paternoster of the Langue Guiloco de la Mission de San Francisco). Latham, Opuscula, 347, 1860. Latham, El. Comp. Phil., 414, 1862 (same as above).

= Meewoc, Powers in Overland Monthly, 322, April, 1873 (general account of family with allusions to language). Gatschet in Mag. Am. Hist., 159, 1877 (gives habitat and bands of family). Gatschet in Beach, Ind. Misc., 433, 1877.

= Mí-wok, Powers in Cont. N. A. Eth., III, 246, 1877 (nearly as above).

< Mutsun, Powell in Cont. N. A. Eth., III, 535, 1877 (vocabs. of Mi'-wok, Tuolumne, Costano, Tcho-ko-yem, Mūtsūn, Santa Clara, Santa Cruz, Chum-te'-ya, Kawéya, San Raphael Mission, Talatui, Olamentke). Gatschet in Mag. Am. Hist., 157, 1877 (gives habitat and members of family). Gatschet, in Beach, Ind. Misc., 430, 1877.

× Runsiens, Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (includes Olhones, Eslenes, Santa Cruz, San Miguel, Lopillamillos, Mipacmacs, Kulanapos, Yolos, Suisunes, Talluches, Chowclas, Waches, Talches, Poowells).

Derivation: From the river and hill of same name in Calaveras County, California; according to Powers the Meewoc name for the river is Wakalumitoh.

The Talatui mentioned by Hale[1] as on the Kassima (Cosumnes) River belong to the above family. Though this author clearly distinguished the language from any others with which he was acquainted, he nowhere expressed the opinion that it is entitled to family rank or gave it a family name. Talatui is mentioned as a tribe from which he obtained an incomplete vocabulary.

It was not until 1856 that the distinctness of the linguistic family was fully set forth by Latham. Under the head of Moquelumne, this author gathers several vocabularies representing different languages and dialects of the same stock. These are the Talatui of Hale, the Tuolumne from Schoolcraft, the Sonoma dialects as represented by the Tshokoyem vocabulary, the Chocuyem and Youkiousme paternosters, and the Olamentke of Kostromitonov in Bäer's Beiträge. He also places here provisionally the paternosters from the Mission de Santa Clara and the Vallee de los Tulares of Mofras; also the language Guiloco de la Mission de San Francisco. The Costano containing the five tribes of the Mission of Dolores, viz., the Ahwastes, Olhones or Costanos of the coast, Romonans, Tulomos and the Altahmos seemed to Latham to differ from the Moquelumnan language. Concerning them he states "upon the whole, however, the affinities seem to run in the direction of the languages of the next

[1] U. S. Expl. Exp., 1846, vol. 6, pp. 630, 633.

group, especially in that of the Ruslen. He adds: "Nevertheless, for the present I place the Costano by itself, as a transitional form of speech to the languages spoken north, east, and south of the Bay of San Francisco." Recent investigation by Messrs. Curtin and Henshaw have confirmed the soundness of Latham's views and, as stated under head of the Costanoan family, the two groups of languages are considered to be distinct.

GEOGRAPHIC DISTRIBUTION.

The Moquelumnan family occupies the territory bounded on the north by the Cosumne River, on the south by the Fresno River, on the east by the Sierra Nevada, and on the west by the San Joaquin River, with the exception of a strip on the east bank occupied by the Cholovone. A part of this family occupies also a territory bounded on the south by San Francisco Bay and the western half of San Pablo Bay; on the west by the Pacific Ocean from the Golden Gate to Bodega Head; on the north by a line running from Bodega Head to the Yukian territory northeast of Santa Rosa, and on the east by a line running from the Yukian territory to the northernmost point of San Pablo Bay.

PRINCIPAL TRIBES.

Miwok division:

Awani.	Lopolatimne.	Seroushamne.
Chauchila.	Machemni.	Talatui.
Chumidok.	Mokelumni.	Tamoleka.
Chumtiwa.	Newichumni.	Tumidok.
Chumuch.	Olowidok.	Tumun.
Chumwit.	Olowit.	Walakumni.
Hettitoya.	Olowiya.	Yuloni.
Kani.	Sakaiakumni.	

Olamentke division:

Bollanos.	Nicassias.	Sonomi.
Chokuyem.	Numpali.	Tamal.
Guimen.	Olamentke.	Tulare.
Likatuit.	Olumpali.	Utchium.

Population.—Comparatively few of the Indians of this family survive, and these are mostly scattered in the mountains and away from the routes of travel. As they were never gathered on reservations, an accurate census has not been taken.

In the detached area north of San Francisco Bay, chiefly in Marin County, formerly inhabited by the Indians of this family, almost none remain. There are said to be none living about the mission of San Rafael, and Mr. Henshaw, in 1888, succeeded in locating only six at Tomales Bay, where, however, he obtained a very good vocabulary from a woman.

MUSKHOGEAN FAMILY.

>Muskhogee, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 94, 306, 1836 (based upon Muskhogees, Hitchittees, Seminoles). Prichard, Phys. Hist. Mankind, v, 402, 1847 (includes Muskhogees, Seminoles, Hitchittees).

>Muskhogies, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

>Muscogee, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 471, 1878 (includes Muscogees proper, Seminoles, Choctaws, Chickasaws, Hitchittees, Coosadas or Coosas, Alibamons, Apalaches).

=Maskoki, Gatschet, Creek Mig. Legend, I, 50, 1884 (general account of family; four branches, Maskoki, Apalachian, Alibamu, Chahta). Berghaus, Physik. Atlas, map 72, 1887.

>Choctaw Muskhogee, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 119, 1836.

>Chocta-Muskhog, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Gallatin in Schoolcraft, Ind. Tribes. III, 401, 1853.

=Chata-Muskoki, Hale in Am. Antiq., 108, April, 1883 (considered with reference to migration).

>Chahtas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 100, 306, 1836 (or Choctaws).

>Chahtahs, Prichard, Phys. Hist. Mankind, v, 403, 1847 (or Choktahs or Flat-heads).

>Tschahtas, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

>Choctah, Latham, Nat. Hist. Man, 337, 1850 (includes Choctahs, Muscogulges, Muskohges). Latham in Trans. Phil. Soc. Lond., 103, 1856. Latham, Opuscula, 366, 1860.

>Mobilian, Bancroft, Hist. U. S., 249, 1840.

>Flat-heads, Prichard, Phys. Hist. Mankind, v, 403, 1847 (Chahtahs or Choktahs).

>Coshattas, Latham, Nat. Hist. Man, 349, 1850 (not classified).

>Humas, Latham, Nat. Hist. Man, 341, 1850 (east of Mississippi above New Orleans).

Derivation: From the name of the principal tribe of the Creek Confederacy.

In the Muskhogee family Gallatin includes the Muskhogees proper, who lived on the Coosa and Tallapoosa Rivers; the Hitchittees, living on the Chattahoochee and Flint Rivers; and the Seminoles of the peninsula of Florida. It was his opinion, formed by a comparison of vocabularies, that the Choctaws and Chickasaws should also be classed under this family. In fact, he called[1] the family Choctaw Muskhogee. In deference, however, to established usage, the two tribes were kept separate in his table and upon the colored map. In 1848 he appears to be fully convinced of the soundness of the view doubtfully expressed in 1836, and calls the family the Chocta-Muskhog.

GEOGRAPHIC DISTRIBUTION.

The area occupied by this family was very extensive. It may be described in a general way as extending from the Savannah River and the Atlantic west to the Mississippi, and from the Gulf of Mexico north to the Tennessee River. All of this territory was held by Muskhogean tribes except the small areas occupied by the Yuchi, Ná'htchi, and some small settlements of Shawni.

[1] On p. 119, Archæologia Americana.

Upon the northeast Muskhogean limits are indeterminate. The Creek claimed only to the Savannah River; but upon its lower course the Yamasi are believed to have extended east of that river in the sixteenth to the eighteenth century.[1] The territorial line between the Muskhogean family and the Catawba tribe in South Carolina can only be conjectured.

It seems probable that the whole peninsula of Florida was at one time held by tribes of Timuquanan connection; but from 1702 to 1708, when the Apalachi were driven out, the tribes of northern Florida also were forced away by the English. After that time the Seminole and the Yamasi were the only Indians that held possession of the Floridian peninsula.

PRINCIPAL TRIBES.

Alibamu.	Choctaw.	Seminole.
Apalachi.	Creek or Maskoki proper.	Yamacraw.
Chicasa.	Koasáti.	Yamasi.

Population.—There is an Alibamu town on Deep Creek, Indian Territory, an affluent of the Canadian, Indian Territory. Most of the inhabitants are of this tribe. There are Alibamu about 20 miles south of Alexandria, Louisiana, and over one hundred in Polk County, Texas.

So far as known only three women of the Apalachi survived in 1886, and they lived at the Alibamu town above referred to. The United States Census bulletin for 1890 gives the total number of pure-blood Choctaw at 9,996, these being principally at Union Agency, Indian Territory. Of the Chicasa there are 3,464 at the same agency; Creek 9,291; Seminole 2,539; of the latter there are still about 200 left in southern Florida.

There are four families of Koasáti, about twenty-five individuals, near the town of Shepherd, San Jacinto County, Texas. Of the Yamasi none are known to survive.

NATCHESAN FAMILY.

>Natches, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 95, 306, 1836 (Natches only). Prichard, Phys. Hist. Mankind, V, 402, 403, 1847.

>Natsches, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

>Natchez, Bancroft, Hist. U. S., 248, 1840. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848 (Natchez only). Latham, Nat. Hist. Man, 340, 1850 (tends to include Taensas, Pascagoulas, Colapissas, Biluxi in same family). Gallatin in Schoolcraft, Ind. Tribes, III, 401, 1853 (Natchez only). Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 473, 1878 (suggests that it may include the Utchees).

>Naktche, Gatschet, Creek Mig. Legend, I, 34, 1884. Gatschet in Science, 414, April 29, 1887.

[1] Gatschet, Creek Mig. Legend, 1884, vol. 1, p. 62.

>Taensa, Gatschet in The Nation, 382, May 4, 1882. Gatschet in Am. Antiq., IV, 238, 1882. Gatschet, Creek Mig. Legend, I, 33, 1884. Gatschet in Science, 414, April 29, 1887 (Taensas only).

The Na'htchi, according to Gallatin, a residue of the well-known nation of that name, came from the banks of the Mississippi, and joined the Creek less than one hundred years ago.[1] The seashore from Mobile to the Mississippi was then inhabited by several small tribes, of which the Na'htchi was the principal.

Before 1730 the tribe lived in the vicinity of Natchez, Miss., along St. Catherine Creek. After their dispersion by the French in 1730 most of the remainder joined the Chicasa and afterwards the Upper Creek. They are now in Creek and Cherokee Nations, Indian Territory.

The linguistic relations of the language spoken by the Taensa tribe have long been in doubt, and it is probable that they will ever remain so. As no vocabulary or text of this language was known to be in existence, the "Grammaire et vocabulaire de la langue Taensa, avec textes traduits et commentés par J.-D. Haumonté, Parisot, L. Adam," published in Paris in 1882, was received by American linguistic students with peculiar interest. Upon the strength of the linguistic material embodied in the above Mr. Gatschet (loc. cit.) was led to affirm the complete linguistic isolation of the language.

Grave doubts of the authenticity of the grammar and vocabulary have, however, more recently been brought forward.[2] The text contains internal evidences of the fraudulent character, if not of the whole, at least of a large part of the material. So palpable and gross are these that until the character of the whole can better be understood by the inspection of the original manuscript, alleged to be in Spanish, by a competent expert it will be far safer to reject both the vocabulary and grammar. By so doing we are left without any linguistic evidence whatever of the relations of the Taensa language.

D'Iberville, it is true, supplies us with the names of seven Taensa towns which were given by a Taensa Indian who accompanied him; but most of these, according to Mr. Gatschet, were given in the Chicasa trade jargon or, as termed by the French, the "Mobilian trade jargon," which is at least a very natural supposition. Under these circumstances we can, perhaps, do no better than rely upon the statements of several of the old writers who appear to be unanimous in regarding the language of the Taensa as of Na'htchi connection. Du Pratz's statement to that effect is weakened from the fact that the statement also includes the Shetimasha, the language of which is known from a vocabulary to be totally distinct not only from the Na'htchi but from any other. To supplement Du Pratz's testimony, such as it is, we have the statements of M. de Montigny, the

[1] Trans. Am. Antiq. Soc., 1836, vol. 2, p. 95.

[2] D. G. Brinton in Am. Antiquarian, March, 1885, pp. 109-114.

missionary who affirmed the affinity of the Taensa language to that of the Na'htchi, before he had visited the latter in 1699, and of Father Gravier, who also visited them. For the present, therefore, the Taensa language is considered to be a branch of the Na'htchi.

The Taensa formerly dwelt upon the Mississippi, above and close to the Na'htchi. Early in the history of the French settlements a portion of the Taensa, pressed upon by the Chicasa, fled and were settled by the French upon Mobile Bay.

PRINCIPAL TRIBES.

Na'htchi. Taensa.

Population.—There still are four Na'htchi among the Creek in Indian Territory and a number in the Cheroki Hills near the Missouri border.

PALAIHNIHAN FAMILY.

=Palaihnih, Hale in U. S. Expl. Expd., VI, 218, 569, 1846 (used in family sense).

=Palaik, Hale in U. S. Expl. Expd., VI, 199, 218, 569, 1846 (southeast of Lutuami in Oregon), Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 18, 77, 1848. Latham, Nat. Hist. Man., 325, 1850 (southeast of Lutuami). Berghaus (1851), Physik. Atlas, map 17, 1852. Latham in Proc. Philolog. Soc. Lond., VI, 82, 1854 (cites Hale's vocab). Latham in Trans. Philolog. Soc. Lond., 74, 1856 (has Shoshoni affinities). Latham, Opuscula, 310, 341, 1860. Latham, El. Comp. Phil., 407, 1862.

=Palainih, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 1848. (after Hale). Berghaus (1851), Physik. Atlas, map 17, 1852.

=Pulairih, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (obvious typographical error; quotes Hale's Palaiks).

=Pit River, Powers in Overland Monthly, 412, May, 1874 (three principal tribes: Achomáwes, Hamefcuttelies, Astakaywas or Astakywich). Gatschet in Mag. Am. Hist., 164, 1877 (gives habitat; quotes Hale for tribes). Gatschet in Beach, Ind. Misc., 439, 1877.

=A-cho-má'-wi, Powell in Cont. N. A. Eth., III, 601, 1877, vocabs. of A-cho-má'-wi and Lutuami). Powers in ibid., 267 (general account of tribes; A-cho-má'-wi, Hu-má'-whi, Es-ta-ke'-wach, Han-te'-wa, Chu-má'-wa, A-tu-a'-mih, Il-má'-wi).

<Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 475, 1878 (includes Palaiks).

<Shasta, Bancroft, Nat. Races, III, 565, 1882 (contains Palaik of present family).

Derivation: From the Klamath word *p'laikni*, signifying "mountaineers" or "uplanders" (Gatschet).

In two places[1] Hale uses the terms Palaihnih and Palaiks interchangeably, but inasmuch as on page 569, in his formal table of linguistic families and languages, he calls the family Palaihnih, this is given preference over the shorter form of the name.

Though here classed as a distinct family, the status of the Pit River dialects can not be considered to be finally settled. Powers speaks of the language as "hopelessly consonantal, harsh, and sesquipedalian," * * * "utterly unlike the sweet and simple lan-

[1] U. S. Expl. Expd., 1846, vol. 6, pp. 199, 218.

guages of the Sacramento." He adds that the personal pronouns show it to be a true Digger Indian tongue. Recent investigations by Mr. Gatschet lead him, however, to believe that ultimately it will be found to be linguistically related to the Sastean languages.

GEOGRAPHIC DISTRIBUTION.

The family was located by Hale to the southeast of the Lutuami (Klamath). They chiefly occupied the area drained by the Pit River in extreme northeastern California. Some of the tribe were removed to Round Valley Reservation, California.

PRINCIPAL TRIBES.

Powers, who has made a special study of the tribe, recognizes the following principal tribal divisions :[1]

Achomâ'wi.	Estake'wach.	Ilmâ'wi.
Atua'mih.	Hante'wa.	Pakamalli?
Chumâ'wa.	Humâ'whi.	

PIMAN FAMILY.

=Pima, Latham, Nat. Hist. Man, 398, 1850 (cites three languages from the Mithridates, viz, Pima proper, Opata, Eudeve). Turner in Pac. R. R. Rep., III, pt. 3, 55, 1856 (Pima proper). Latham in Trans. Philolog. Soc. Lond., 92, 1856 (contains Pima proper, Opata, Eudeve, Papagos). Latham, Opuscula, 356, 1860. Latham, El. Comp. Phil., 427, 1862 (includes Pima proper, Opata, Eudeve, Papago, Ibequi, Hiaqui, Tubar, Tarahumara, Cora). Gatschet in Mag. Am. Hist., 156, 1877 (includes Pima, Névome, Pápago). Gatschet in Beach, Ind. Misc., 429, 1877 (defines area and gives habitat).

Latham used the term Pima in 1850, citing under it three dialects or languages. Subsequently, in 1856, he used the same term for one of the five divisions into which he separates the languages of Sonora and Sinaloa.

The same year Turner gave a brief account of Pima as a distinct language, his remarks applying mainly to Pima proper of the Gila River, Arizona. This tribe had been visited by Emory and Johnston and also described by Bartlett. Turner refers to a short vocabulary in the Mithridates, another of Dr. Coulter's in Royal Geological Society Journal, vol. XI, 1841, and a third by Parry in Schoolcraft, Indian Tribes, vol. III, 1853. The short vocabulary he himself published was collected by Lieut. Whipple.

Only a small portion of the territory occupied by this family is included within the United States, the greater portion being in Mexico where it extends to the Gulf of California. The family is represented in the United States by three tribes, Pima alta, Sobaipuri, and Papago. The former have lived for at least two centuries with the

[1] Cont. N. A. Eth. vol. 3, p. 267.

Maricopa on the Gila River about 160 miles from the mouth. The Sobaipuri occupied the Santa Cruz and San Pedro Rivers, tributaries of the Gila, but are no longer known. The Papago territory is much more extensive and extends to the south across the border. In recent times the two tribes have been separated, but the Pima territory as shown upon the map was formerly continuous to the Gila River.

According to Buschmann, Gatschet, Brinton, and others the Pima language is a northern branch of the Nahuatl, but this relationship has yet to be demonstrated.[1]

PRINCIPAL TRIBES.

Northern group:

Opata.	Papago.	Pima.

Southern group:

Cahita.	Tarahumara.	Tepeguana.
Cora.		

Population.—Of the above tribes the Pima and Papago only are within our boundaries. Their numbers under the Pima Agency, Arizona,[2] are Pima, 4,464; Papago, 5,163.

PUJUNAN FAMILY.

>Pujuni, Latham in Trans. Philolog. Soc. Lond., 80, 1856 (contains Pujuni, Secumne, Tsamak of Hale, Cushna of Schoolcraft). Latham, Opuscula, 346, 1860.

>Meidoos, Powers in Overland Monthly, 420, May, 1874.

=Meidoo, Gatschet in Mag. Am. Hist., 159, 1877 (gives habitat and tribes). Gatschet in Beach, Ind. Misc., 433, 1877.

>Mai'-du, Powers in Cont. N. A. Eth., III, 282, 1877 (same as Mai'-deh; general account of; names the tribes). Powell, ibid., 586 (vocabs. of Kon'-kau, Hol-o'-lu-pai, Na'-kum, Ni'-shi-nam, "Digger," Cushna, Nishinam, Yuba or Nevada, Punjuni, Sekumne, Tsamak).

>Neeshenams, Powers in Overland Monthly, 21, Jan., 1874 (considers this tribe doubtfully distinct from Meidoo family).

>Ni-shi-nam, Powers in Cont. N. A. Eth., III, 313, 1877 (distinguishes them from Maidu family).

×Sacramento Valley, Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (Ochecumne, Chupumne, Secumne, Cosumne, Sololumne, Puzlumne, Yasumne, etc.; "altogether about 26 tribes").

The following tribes were placed in this group by Latham: Pujuni, Secumne, Tsamak of Hale, and the Cushna of Schoolcraft. The name adopted for the family is the name of a tribe given by Hale.[3] This was one of the two races into which, upon the information of Captain Sutter as derived by Mr. Dana, all the Sacramento tribes

[1] Buschmann, Die Pima-Sprache und die Sprache der Koloschen, pp. 321–432.

[2] According to the U. S. Census Bulletin for 1890.

[3] U. S. Expl. Exp., VI, p. 631.

were believed to be divided. "These races resembled one another in every respect but language."

Hale gives short vocabularies of the Pujuni, Sekumne, and Tsamak. Hale did not apparently consider the evidence as a sufficient basis for a family, but apparently preferred to leave its status to be settled later.

GEOGRAPHIC DISTRIBUTION.

The tribes of this family have been carefully studied by Powers, to whom we are indebted for most all we know of their distribution. They occupied the eastern bank of the Sacramento in California, beginning some 80 or 100 miles from its mouth, and extended northward to within a short distance of Pit River, where they met the tribes of the Palaihnihan family. Upon the east they reached nearly to the border of the State, the Palaihnihan, Shoshonean, and Washoan families hemming them in in this direction.

PRINCIPAL TRIBES.

Bayu.	Kū'lmeh.	Tíshum.
Boka.	Kulomum.	Toámtcha.
Eskin.	Kwatóa.	Tosikoyo.
Hélto.	Nakum.	Toto.
Hoak.	Olla.	Ustóma.
Hoankut.	Otaki.	Wapúmni.
Hololúpai.	Paupákan.	Wima.
Koloma.	Pusúna.	Yuba.
Konkau.	Taitchida.	

QUORATEAN FAMILY.

>Quoratem, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (proposed as a proper name of family "should it be held one").

>Eh-nek, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (given as name of a band only; but suggests Quoratem as a proper family name).

>Ehnik, Latham in Trans. Philolog. Soc. Lond., 76, 1856 (south of Shasti and Lutuami areas). Latham, Opuscula, 342, 1860.

=Cahrocs, Powers in Overland Monthly, 328, April, 1872 (on Klamath and Salmon Rivers).

=Cahrok, Gatschet in Beach, Ind. Misc., 438, 1877.

=Ka'-rok, Powers in Cont. N. A. Eth., III, 19, 1877. Powell in ibid., 447, 1877 (vocabularies of Ka'-rok, Arra-Arra, Peh'-tsik, Eh-nek).

<Klamath, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 475, 1878 (cited as including Cahrocs).

Derivation: Name of a band at mouth of Salmon River, California. Etymology unknown.

This family name is equivalent to the Cahroc or Karok of Powers and later authorities.

In 1853, as above cited, Gibbs gives Eh-nek as the titular heading of his paragraphs upon the language of this family, with the remark

that it is "The name of a band at the mouth of the Salmon, or Quoratem river." He adds that "This latter name may perhaps be considered as proper to give to the family, should it be held one." He defines the territory occupied by the family as follows: "The language reaches from Bluff creek, the upper boundary of the Pohlik, to about Clear creek, thirty or forty miles above the Salmon; varying, however, somewhat from point to point."

The presentation of the name Quoratem, as above, seems sufficiently formal, and it is therefore accepted for the group first indicated by Gibbs.

In 1856 Latham renamed the family Ehnik, after the principal band, locating the tribe, or rather the language, south of the Shasti and Lutuami areas.

GEOGRAPHIC DISTRIBUTION.

The geographic limits of the family are somewhat indeterminate, though the main area occupied by the tribes is well known. The tribes occupy both banks of the lower Klamath from a range of hills a little above Happy Camp to the junction of the Trinity, and the Salmon River from its mouth to its sources. On the north, Quoratean tribes extended to the Athapascan territory near the Oregon line.

TRIBES.

Ehnek. Karok. Pehtsik.

Population.—According to a careful estimate made by Mr. Curtin in the region in 1889, the Indians of this family number about 600.

SALINAN FAMILY.

< Salinas, Latham in Trans. Philolog. Soc. Lond., 85, 1856 (includes Gioloco, Ruslen, Soledad of Mofras, Eslen, Carmel, San Antonio, San Miguel). Latham, Opuscula, 350, 1860.

> San Antonio, Powell in Cont. N. A. Eth., III, 568, 1877 (vocabulary of; not given as a family, but kept by itself).

< Santa Barbara, Gatschet in Mag. Am. Hist., 157, 1877 (cited here as containing San Antonio). Gatschet in U. S. Geog. Surv. W. 100th M., VII, 419, 1879 (contains San Antonio, San Miguel).

× Runsiens, Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (San Miguel of his group belongs here).

Derivation: From river of same name.

The language formerly spoken at the Missions of San Antonio and San Miguel in Monterey County, California, have long occupied a doubtful position. By some they have been considered distinct, not only from each other, but from all other languages. Others have held that they represent distinct dialects of the Chumashan (Santa Barbara) group of languages. Vocabularies collected in 1884 by Mr. Henshaw show clearly that the two are closely connected dialects and that they are in no wise related to any other family.

The group established by Latham under the name Salinas is a heterogeneous one, containing representatives of no fewer than four distinct families. Gioloco, which he states "may possibly belong to this group, notwithstanding its reference to the Mission of San Francisco," really is congeneric with the vocabularies assigned by Latham to the Mendocinan family. The "Soledad of Mofras" belongs to the Costanoan family mentioned on page 348 of the same essay, as also do the Ruslen and Carmel. Of the three remaining forms of speech, Eslen, San Antonio, and San Miguel, the two latter are related dialects, and belong within the drainage of the Salinas River. The term Salinan is hence applied to them, leaving the Eslen language to be provided with a name.

Population.—Though the San Antonio and San Miguel were probably never very populous tribes, the Missions of San Antonio and San Miguel, when first established in the years 1771 and 1779, contained respectively 1,400 and 1,200 Indians. Doubtless the larger number of these converts were gathered in the near vicinity of the two missions and so belonged to this family. In 1884 when Mr. Henshaw visited the missions he was able to learn of the existence of only about a dozen Indians of this family, and not all of these could speak their own language.

SALISHAN FAMILY.

>Salish, Gallatin in Trans. Am. Antiq. Soc., II, 134, 306, 1836 (or Flat Heads only). Latham in Proc. Philolog. Soc. Lond., II, 31–50, 1846 (of Duponceau. Said to be the Okanagan of Tolmie).

× Salish, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 474, 1878 (includes Flatheads, Kalispelms, Skitsuish, Colvilles, Quarlpi, Spokanes, Pisquouse, Soaiatlpi).

= Salish, Bancroft, Nat. Races, III, 565, 618, 1882.

> Selish, Gallatin in Trans. Am. Eth. Soc. II, pt. 1, 77, 1848 (vocab. of Nsietshaws). Tolmie and Dawson, Comp. Vocabs,, 63, 78, 1884 (vocabularies of Lillooet and Kullēspelm).

> Jelish, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (obvious misprint for Selish; follows Hale as to tribes).

= Selish, Gatschet in Mag. Am. Hist., 169, 1877 (gives habitat and tribes of family). Gatschet in Beach, Ind. Misc., 444, 1877.

< Selish, Dall, after Gibbs, in Cont. N. A. Eth., I, 241, 1877 (includes Yakama, which is Shahaptian).

> Tsihaili-Selish, Hale in U. S. Expl. Exp., VI, 205, 535, 569, 1846 (includes Shushwaps. Selish or Flatheads, Skitsuish, Piskwaus, Skwale, Tsihailish, Kawelitsk, Nsietshawus). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 10, 1848 (after Hale). Berghaus (1851), Physik. Atlas, map 17, 1852. Buschmann, Spuren der aztek. Sprache, 658–661, 1859. Latham, El. Comp. Phil., 399, 1862 (contains Shushwap or Atna Proper, Kuttelspelm or Pend d'Oreilles, Selish, Spokan, Okanagan, Skitsuish, Piskwaus, Nusdalum, Kawitchen, Cathlascou, Skwali, Chechili, Kwaintl, Kwenaiwtl, Nsietshawus, Billechula).

> Atnahs, Gallatin in Trans. Am. Antiq. Soc., II, 134, 135, 306, 1836 (on Fraser River). Prichard, Phys. Hist. Mankind, V, 427, 1847 (on Fraser River).

> Atna, Latham in Trans. Philolog. Soc. Lond., 71, 1856 (Tsihaili-Selish of Hale and Gallatin).

× Nootka-Columbian, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 224, 1841 (includes, among others, Billechoola, Kawitchen, Noosdalum, Squallyamish of present family).

× Insular, Scouler, ibid., (same as Nootka-Columbian family).

× Shahaptan, Scouler, ibid., 225 (includes Okanagan of this family).

× Southern, Scouler, ibid., 224 (same as Nootka-Columbian family).

> Billechoola, Latham in Jour. Eth. Soc. Lond., I, 154, 1848 (assigns Friendly Village of McKenzie here). Latham, Opuscula, 250, 1860 (gives Tolmie's vocabulary).

> Billechula, Latham, Nat. Hist. Man, 300, 1850 (mouth of Salmon River). Latham in Trans. Philolog. Soc. Lond., 72, 1856 (same). Latham, Opuscula, 339, 1860.

> Bellacoola, Bancroft, Nat. Races, III, 564, 607, 1882 (Bellacoolas only; specimen vocabulary).

> Bilhoola, Tolmie and Dawson, Comp. Vocabs., 62, 1884 (vocab. of Noothlākimish).

> Bilchula, Boas in Petermann's Mitteilungen, 130, 1887 (mentions Sātsq, Nūtę'l, Nuchalkmχ. Taleómχ).

× Naass, Gallatin in Trans. Am. Eth. Soc. II, pt. 1, c, 77, 1848 (cited as including Billechola).

> Tsihaili, Latham, Nat. Hist. Man, 310, 1850 (chiefly lower part of Fraser River and between that and the Columbia; includes Shuswap, Salish, Skitsuish, Piskwaus, Kawitchen, Skwali, Checheeli, Kowelits, Noosdalum, Nsietshawus).

× Wakash, Latham, Nat. Hist. Man, 301, 1850 (cited as including Klallems).

× Shushwaps, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 474, 1878 (quoted as including Shewhapmuch and Okanagans).

× Hydahs, Keane, ibid., 473 (includes Bellacoolas of present family).

× Nootkahs, Keane, ibid., 473 (includes Komux, Kowitchans, Klallums, Kwantlums, Teets of present family).

× Nootka, Bancroft, Nat. Races, III, 564, 1882 (contains the following Salishan tribes: Cowichin, Soke, Comux, Noosdalum, Wickinninish, Songhie, Sanetch, Kwantlum, Teet, Nanaimo, Newchemass, Shimiahmoo, Nooksak, Samish, Skagit, Snohomish, Clallam, Toanhooch).

< Puget Sound Group, Keane, App. Stanford's Comp. (Cent. and So. Am.), 474, 1878 (comprises Nooksahs, Lummi, Samish, Skagits, Nisqually, Neewamish, Sahmamish, Snohomish, Skeewamish, Squanamish, Klallums, Classets, Chehalis, Cowlitz, Pistchin, Chinakum; all but the last being Salishan).

> Flatheads, Keane, ibid., 474, 1878 (same as his Salish above).

> Kawitshin, Tolmie and Dawson, Comp. Vocabs., 39, 1884 (vocabs. of Songis and Kwantlin Sept and Kowmook or Tlathool).

> Qauitschin, Boas in Petermann's Mitteilungen, 131, 1887.

> Niskwalli, Tolmie and Dawson, Comp. Vocabs., 50, 121, 1884 (or Skwalliamish vocabulary of Sinahomish).

The extent of the Salish or Flathead family was unknown to Gallatin, as indeed appears to have been the exact locality of the tribe of which he gives an anonymous vocabulary from the Duponceau collection. The tribe is stated to have resided upon one of the branches of the Columbia River, "which must be either the most southern branch of Clarke's River or the most northern branch of Lewis's River." The former supposition was correct. As employed by Gallatin the family embraced only a single tribe, the Flathead tribe proper. The Atnah, a Salishan tribe, were considered by Gallatin to be distinct, and the name would be eligible as the family

name ; preference, however, is given to Salish. The few words from the Friendly Village near the sources of the Salmon River given by Gallatin in Archæologia Americana, II, 1836, pp. 15, 306, belong under this family.

GEOGRAPHIC DISTRIBUTION.

Since Gallatin's time, through the labors of Riggs, Hale, Tolmie, Dawson, Boas, and others, our knowledge of the territorial limits of this linguistic family has been greatly extended. The most southern outpost of the family, the Tillamook and Nestucca, were established on the coast of Oregon, about 50 miles to the south of the Columbia, where they were quite separated from their kindred to the north by the Chinookan tribes. Beginning on the north side of Shoalwater Bay, Salishan tribes held the entire northwestern part of Washington, including the whole of the Puget Sound region, except only the Macaw territory about Cape Flattery, and two insignificant spots, one near Port Townsend, the other on the Pacific coast to the south of Cape Flattery, which were occupied by Chimakuan tribes. Eastern Vancouver Island to about midway of its length was also held by Salishan tribes, while the great bulk of their territory lay on the mainland opposite and included much of the upper Columbia. On the south they were hemmed in mainly by the Shahaptian tribes. Upon the east Salishan tribes dwelt to a little beyond the Arrow Lakes and their feeder, one of the extreme north forks of the Columbia. Upon the southeast Salishan tribes extended into Montana, including the upper drainage of the Columbia. They were met here in 1804 by Lewis and Clarke. On the northeast Salish territory extended to about the fifty-third parallel. In the northwest it did not reach the Chilcat River.

Within the territory thus indicated there is considerable diversity of customs and a greater diversity of language. The language is split into a great number of dialects, many of which are doubtless mutually unintelligible.

The relationship of this family to the Wakashan is a very interesting problem. Evidences of radical affinity have been discovered by Boas and Gatschet, and the careful study of their nature and extent now being prosecuted by the former may result in the union of the two, though until recently they have been considered quite distinct.

PRINCIPAL TRIBES.

Atnah.	Copalis.	Met'how.
Bellacoola.	Cowichin.	Nanaimo.
Chehalis.	Cowlitz.	Nanoos.
Clallam.	Dwamish.	Nehalim.
Colville.	Kwantlen.	Nespelum.
Comux.	Lummi.	Nicoutamuch.

PRINCIPAL TRIBES—continued.

Nisqualli.	Sans Puell.	Snoqualmi.
Nuksahk.	Satsop.	Soke.
Okinagan.	Sawamish.	Songish.
Pend d'Oreilles.	Sekamish.	Spokan.
Pentlatc.	Shomamish.	Squawmisht.
Pisquow.	Shooswap.	Squaxon.
Puyallup.	Shotlemamish.	Squonamish.
Quaitso.	Skagit.	Stehtsasamish.
Queniut.	Skihwamish.	Stillacum.
Queptlmamish.	Skitsuish.	Sumass.
Sacumehu.	Skokomish.	Suquamish.
Sahewamish.	Skopamish.	Swinamish.
Salish.	Sktehlmish.	Tait.
Samamish.	Smulkamish.	Tillamook.
Samish.	Snohomish.	Twana.
Sanetch.		

Population.—The total Salish population of British Columbia is 12,325, inclusive of the Bellacoola, who number, with the Hailtzuk, 2,500, and those in the list of unclassified, who number 8,522, distributed as follows:

Under the Fraser River Agency, 4,986; Kamloops Agency, 2,579; Cowichan Agency, 1,852; Okanagan Agency, 942; Williams Lake Agency, 1,918; Kootenay Agency, 48.

Most of the Salish in the United States are on reservations. They number about 5,500, including a dozen small tribes upon the Yakama Reservation, which have been consolidated with the Clickatat (Shahaptian) through intermarriage. The Salish of the United States are distributed as follows (Indian Affairs Report, 1889, and U. S. Census Bulletin, 1890):

Colville Agency, Washington, Cœur d' Alene, 422; Lower Spokane, 417; Lake, 303; Colville, 247; Okinagan, 374; Nespilem, 67; San Pueblo (Sans Puell), 300; Calispel, 200; Upper Spokane, 170.

Puyallup Agency, Washington, Quaitso, 82; Quinaielt (Queniut), 101; Humptulip, 19; Puyallup, 563; Chehalis, 135; Nisqually, 94; Squaxon, 60; Clallam, 351; Skokomish, 191; Oyhut, Hoquiam, Montesano, and Satsup, 29.

Tulalip Agency, Washington, Snohomish, 443; Madison, 144; Muckleshoot, 103; Swinomish, 227; Lummi, 295.

Grande Ronde Agency, Oregon, Tillamook, 5.

SASTEAN FAMILY.

= Saste, Hale in U. S. Expl. Exp., VI, 218, 569, 1846. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 77, 1848. Berghaus (1851), Physik. Atlas, map 17, 1852. Buschmann, Spuren der aztek. Sprache, 572, 1859.

= Shasty, Hale in U. S. Expl. Exp., VI. 218, 1846 (= Saste). Buschmann, Spuren der aztek. Sprache, 572, 1859 (= Saste).

= Shasties, Hale in U. S. Expl. Exp., VI, 199, 569, 1846 (= Saste). Berghaus (1851), Physik. Atlas, map 17, 1852.

= Shasti, Latham, Nat. Hist. Man, 325, 1850 (southwest of Lutuami). Latham in Proc. Philolog. Soc., Lond., VI, 82, 1854. Latham, ibid, 74, 1856. Latham, Opuscula, 310, 341, 1860 (allied to both Shoshonean and Shahaptian families). Latham, El. Comp. Phil., 407, 1862.

= Shasté, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (mentions Watsa-he'-wa, a Scott's River band).

= Sasti, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (= Shasties).

= Shasta, Powell in Cont. N. A. Eth., III, 607, 1877. Gatschet in Mag. Am. Hist., 164, 1877. Gatschet in Beach, Ind. Misc., 438, 1877.

= Shas-ti-ka, Powers in Cont. N. A. Eth., III, 243, 1877.

= Shasta, Gatschet in Mag. Am. Hist., 164, 1877 (= Shasteecas).

< Shasta, Bancroft, Nat. Races, III. 565, 1882 (includes Palaik, Watsahewah, Shasta).

< Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 475, 1878 (contains Shastas of present family).

Derivation: The single tribe upon the language of which Hale based his name was located by him to the southwest of the Lutuami or Klamath tribes. He calls the tribe indifferently Shasties or Shasty, but the form applied by him to the family (see pp. 218, 569) is Saste, which accordingly is the one taken.

GEOGRAPHIC DISTRIBUTION.

The former territory of the Sastean family is the region drained by the Klamath River and its tributaries from the western base of the Cascade range to the point where the Klamath flows through the ridge of hills east of Happy Camp, which forms the boundary between the Sastean and the Quoratean families. In addition to this region of the Klamath, the Shasta extended over the Siskiyou range northward as far as Ashland, Oregon.

SHAHAPTIAN FAMILY.

× Shahaptan, Scouler in Jour. Roy. Geog. Soc., XI, 225, 1841 (three tribes, Shahaptan or Nez-percés, Kliketat, Okanagan; the latter being Salishan).

< Shahaptan, Prichard, Phys. Hist. Mankind, V, 428, 1847 (two classes, Nez-perces proper of mountains, and Polanches of plains; includes also Kliketat and Okanagan).

> Sahaptin, Hale in U. S. Expl. Expd., VI, 198, 212, 542, 1846 (Shahaptin or Nez-percés, Wallawallas, Pelooses, Yakemas, Klikatats). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 14, 1848 (follows Hale). Gallatin, ibid., II, pt. 1, c, 77, 1848 (Nez-percés only). Berghaus (1851), Physik. Atlas, map 17, 1852. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (Nez-perces and Wallawallas). Dall, after Gibbs, in Cont. N. A. Eth., I, 241, 1877 (includes Taitinapam and Kliketat).

> Saptin, Prichard, Phys. Hist. Mankind, V, 428, 1847 (or Shahaptan).

< Sahaptin, Latham, Nat. Hist. Man, 323, 1850 (includes Wallawallas, Kliketat, Proper Sahaptin or Nez-percés, Pelús, Yakemas, Cayús ?). Latham in Trans. Philolog. Soc. Lond., 73, 1856 (includes Waiilatpu). Buschmann, Spuren der

aztek. Sprache, 614, 615, 1859. Latham, Opuscula, 340, 1860 (as in 1856). Latham, El. Comp. Phil., 440, 1862 (vocabularies Sahaptin, Wallawalla, Kliketat). Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 474, 1878 (includes Palouse, Walla Wallas, Yakimas. Tairtlas, Kliketats or Pshawanwappams, Cayuse, Mollale; the two last are Waiilatpuan).

= Sahaptin, Gatschet in Mag. Am. Hist., 168, 1877 (defines habitat and enumerates tribes of). Gatschet in Beach, Ind. Misc., 443, 1877. Bancroft, Nat. Races, III, 565, 620, 1882.

> Shahaptani, Tolmie and Dawson, Comp. Vocabs., 78, 1884 (Whulwhaipum tribe).

> Nez-percés, Prichard, Phys. Hist. Mankind, v, 428, 1847 (see Shahaptan). Keane, App. Stanford's Comp. (Cent. and So. Am.), 474, 1878 (see his Sahaptin).

× Selish, Dall, after Gibbs, in Cont. N. A. Eth., I, 241, 1877 (includes Yakama which belongs here).

Derivation: From a Selish word of unknown significance.

The Shahaptan family of Scouler comprised three tribes—the Shahaptan or Nez Percés, the Kliketat, a scion of the Shahaptan, dwelling near Mount Ranier, and the Okanagan, inhabiting the upper part of Fraser River and its tributaries; "these tribes were asserted to speak dialects of the same language." Of the above tribes the Okinagan are now known to be Salishan.

The vocabularies given by Scouler were collected by Tolmie. The term "Sahaptin" appears on Gallatin's map of 1836, where it doubtless refers only to the Nez Percé tribe proper, with respect to whose linguistic affinities Gallatin apparently knew nothing at the time. At all events the name occurs nowhere in his discussion of the linguistic families.

GEOGRAPHIC DISTRIBUTION.

The tribes of this family occupied a large section of country along the Columbia and its tributaries. Their western boundary was the Cascade Mountains; their westernmost bands, the Klikitat on the north, the Tyigh and Warm Springs on the south, enveloping for a short distance the Chinook territory along the Columbia which extended to the Dalles. Shahaptian tribes extended along the tributaries of the Columbia for a considerable distance, their northern boundary being indicated by about the forty-sixth parallel, their southern by about the forty-fourth. Their eastern extension was interrupted by the Bitter Root Mountains.

PRINCIPAL TRIBES AND POPULATION.

Chopunnish (Nez Percé), 1,515 on Nez Percé Reservation, Idaho.
Klikitat, say one-half of 330 natives, on Yakama Reservation, Washington.
Paloos, Yakama Reservation, number unknown.
Tenaino, 69 on Warm Springs Reservation, Oregon.
Tyigh, 430 on Warm Springs Reservation, Oregon.
Umatilla, 179 on Umatilla Reservation, Oregon.
Walla Walla, 405 on Umatilla Reservation, Oregon.

SHOSHONEAN FAMILY.

>Shoshonees, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 120, 133, 306, 1836 (Shoshonee or Snake only). Hale in U. S. Expl. Exp., VI, 218, 1846 (Wihinasht, Pánasht, Yutas, Sampiches, Comanches). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 77, 1848 (as above). Gallatin, ibid., 18, 1848 (follows Hale; see below). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853. Turner in Pac. R. R. Rep., III, pt. 3, 55, 71, 76, 1856 (treats only of Comanche, Chemehuevi, Cahuillo). Buschmann, Spuren der aztek. Sprache, 552, 649, 1859.

>Shoshoni, Hale in U. S. Expl. Exp., VI, 199, 218, 569, 1846 (Shoshóni, Wihinasht, Pánasht, Yutas, Sampiches, Comanches). Latham in Trans. Philolog. Soc. Lond., 73, 1856. Latham, Opuscula, 340, 1860.

>Schoschonenu Kamantschen, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

>Shoshones, Prichard, Phys. Hist. Mankind, v, 429, 1847 (or Snakes; both sides Rocky Mountains and sources of Missouri).

=Shóshoni, Gatschet in Mag. Am. Hist. 154, 1877. Gatschet in Beach, Ind. Misc., 426, 1877.

<Shoshone, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 477, 1878 (includes Washoes of a distinct family). Bancroft, Nat. Races, III, 567, 661, 1882.

>Snake, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 120, 133, 1836 (or Shoshonees). Hale in U. S. Expl. Exp., VI, 218, 1846 (as under Shoshonee). Prichard, Phys. Hist. Mankind, v, 429, 1847 (as under Shoshones). Turner in Pac. R. R. Rep., III, pt. 3, 76, 1856 (as under Shoshonees). Buschmann, Spuren der aztek. Sprache, 552, 649, 1859 (as under Shoshonees).

<Snake, Keane, App. Stanford's Comp. (Cent. and So. Am.), 477, 1878 (contains Washoes in addition to Shoshonean tribes proper).

>Kizh, Hale in U. S. Expl. Exp., VI, 569, 1846 (San Gabriel language only).

>Netela, Hale, ibid., 569, 1846 (San Juan Capestrano language).

>Paduca, Prichard, Phys. Hist. Mankind, v, 415, 1847 (Cumanches, Kiawas, Utas). Latham, Nat. Hist., Man, 310, 326, 1850. Latham (1853) in Proc. Philolog. Soc. Lond., VI, 73, 1854 (includes Wihinast, Shoshoni, Uta). Latham in Trans. Philolog. Soc. Lond., 96, 1856. Latham, Opuscula, 300, 360, 1860.

<Paduca, Latham, Nat. Hist. Man., 346, 1850 (Wihinast, Bonaks, Diggers, Utahs, Sampiches, Shoshonis, Kiaways, Kaskaias?, Keneways?, Bald-heads, Cumanches, Navahoes, Apaches, Carisos). Latham, El. Comp. Phil., 440, 1862 (defines area of; cites vocabs. of Shoshoni, Wihinasht, Uta, Comanch, Piede or Pa-uta, Chemuhuevi, Cahuillo, Kioway, the latter not belonging here).

>Cumanches, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853.

>Netela-Kij, Latham (1853) in Trans. Philolog. Soc. Lond., VI, 76, 1854 (composed of Netela of Hale, San Juan Capistrano of Coulter, San Gabriel of Coulter, Kij of Hale).

>Capistrano, Latham in Proc. Philolog. Soc. Lond., 85, 1856 (includes Netela, of San Luis Rey and San Juan Capistrano, the San Gabriel or Kij of San Gabriel and San Fernando).

In his synopsis of the Indian tribes[1] Gallatin's reference to this great family is of the most vague and unsatisfactory sort. He speaks of "some bands of Snake Indians or Shoshonees, living on the waters of the river Columbia" (p. 120), which is almost the only allusion to them to be found. The only real claim he possesses to the authorship of the family name is to be found on page 306, where, in his list

[1] Trans. and Coll. Am. Antiq. Soc., II, 1836.

of tribes and vocabularies, he places "Shoshonees" among his other families, which is sufficient to show that he regarded them as a distinct linguistic group. The vocabulary he possessed was by Say.

Buschmann, as above cited, classes the Shoshonean languages as a northern branch of his Nahuatl or Aztec family, but the evidence presented for this connection is deemed to be insufficient.

GEOGRAPHIC DISTRIBUTION.

This important family occupied a large part of the great interior basin of the United States. Upon the north Shoshonean tribes extended far into Oregon, meeting Shahaptian territory on about the forty-fourth parallel or along the Blue Mountains. Upon the northeast the eastern limits of the pristine habitat of the Shoshonean tribes are unknown. The narrative of Lewis and Clarke[1] contains the explicit statement that the Shoshoni bands encountered upon the Jefferson River, whose summer home was upon the head waters of the Columbia, formerly lived within their own recollection in the plains to the east of the Rocky Mountains, whence they were driven to their mountain retreats by the Minnetaree (Atsina), who had obtained firearms. Their former habitat thus given is indicated upon the map, although the eastern limit is of course quite indeterminate. Very likely much of the area occupied by the Atsina was formerly Shoshonean territory. Later a division of the Bannock held the finest portion of southwestern Montana,[2] whence apparently they were being pushed westward across the mountains by Blackfeet.[3] Upon the east the Tukuarika or Sheepeaters held the Yellowstone Park country, where they were bordered by Siouan territory, while the Washaki occupied southwestern Wyoming. Nearly the entire mountainous part of Colorado was held by the several bands of the Ute, the eastern and southeastern parts of the State being held respectively by the Arapaho and Cheyenne (Algonquian), and the Kaiowe (Kiowan). To the southeast the Ute country included the northern drainage of the San Juan, extending farther east a short distance into New Mexico. The Comanche division of the family extended farther east than any other. According to Crow tradition the Comanche formerly lived northward in the Snake River region. Omaha tradition avers that the Comanche were on the Middle Loup River, probably within the present century. Bourgemont found a Comanche tribe on the upper Kansas River in 1724.[4] According to Pike the Comanche territory bordered the Kaiowe on the north, the former occupying the head waters of the upper Red River, Arkansas, and Rio Grande.[5] How

[1] Allen ed., Philadelphia, 1814, vol. 1, p. 418.
[2] U. S. Ind. Aff., 1869, p. 289.
[3] Stevens in Pac. R. R. Rep., 1855, vol. 1, p. 329.
[4] Lewis and Clarke, Allen ed., 1814, vol. 1, p. 34.
[5] Pike, Expl. to sources of the Miss., app. pt. 3, 16, 1810.

far to the southward Shoshonean tribes extended at this early period is not known, though the evidence tends to show that they raided far down into Texas to the territory they have occupied in more recent years, viz, the extensive plains from the Rocky Mountains eastward into Indian Territory and Texas to about 97°. Upon the south Shoshonean territory was limited generally by the Colorado River. The Chemehuevi lived on both banks of the river between the Mohave on the north and the Cuchan on the south, above and below Bill Williams Fork.[1] The Kwaiantikwoket also lived to the east of the river in Arizona about Navajo Mountain, while the Tusayan (Moki) had established their seven pueblos, including one founded by people of Tañoan stock, to the east of the Colorado Chiquito. In the southwest Shoshonean tribes had pushed across California, occupying a wide band of country to the Pacific. In their extension northward they had reached as far as Tulare Lake, from which territory apparently they had dispossessed the Mariposan tribes, leaving a small remnant of that linguistic family near Fort Tejon.[2]

A little farther north they had crossed the Sierras and occupied the heads of San Joaquin and Kings Rivers. Northward they occupied nearly the whole of Nevada, being limited on the west by the Sierra Nevada. The entire southeastern part of Oregon was occupied by tribes of Shoshoni extraction.

PRINCIPAL TRIBES AND POPULATION.

Bannock, 514 on Fort Hall Reservation and 75 on the Lemhi Reservation, Idaho.

Chemehuevi, about 202 attached to the Colorado River Agency, Arizona.

Comanche, 1,598 on the Kiowa, Comanche and Wichita Reservation, Indian Territory.

Gosiute, 256 in Utah at large.

Pai Ute, about 2,300 scattered in southeastern California and southwestern Nevada.

Paviotso, about 3,000 scattered in western Nevada and southern Oregon.

Saidyuka, 145 under Klamath Agency.

Shoshoni, 979 under Fort Hall Agency and 249 at the Lemhi Agency.

Tobikhar, about 2,200, under the Mission Agency, California.

Tukuarika, or Sheepeaters, 108 at Lemhi Agency.

Tusayan (Moki), 1,996 (census of 1890).

Uta, 2,839 distributed as follows: 985 under Southern Ute Agency, Colorado; 1,021 on Ouray Reserve, Utah; 833 on Uintah Reserve, Utah.

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[1] Ives, Colorado River, 1861, p. 54.

[2] Powers in Cont. N. A. Eth., 1877, vol. 3, p. 369.

SIOUAN FAMILY.

×Sioux, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 121, 306, 1836 (for tribes included see text below). Prichard, Phys. Hist. Mankind, v, 408, 1847 (follows Gallatin). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848 (as in 1836). Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852. Gallatin in Schoolcraft, Ind. Tribes, III. 402, 1853. Berghaus, Physik. Atlas, map 72, 1887.

>Sioux, Latham, Nat. Hist. Man, 333, 1850 (includes Winebagoes, Dakotas, Assineboins, Upsaroka, Mandans, Minetari, Osage). Latham in Trans. Philolog. Soc. Lond., 58, 1856 (mere mention of family). Latham, Opuscula, 327, 1860. Latham, El. Comp. Phil., 458, 1862.

>Catawbas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 87, 1836 (Catawbas and Woccons). Bancroft, Hist. U. S., III, 245, et map, 1840. Prichard, Phys. Hist. Mankind, v, 399, 1847. Gallatin in Trans. Am. Eth. Soc., II, pt. 1, xcix, 77, 1848. Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 473, 1878.

>Catahbas, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

>Catawba, Latham, Nat. Hist. Man., 334, 1850 (Woccoon are allied). Gallatin in Schoolcraft, Ind. Tribes, III, 401, 1853.

>Kataba, Gatschet in Am. Antiquarian, IV, 238, 1882. Gatschet, Creek Mig. Legend, I, 15, 1884. Gatschet in Science, 413, April 29, 1887.

>Woccons, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 306, 1836 (numbered and given as a distinct family in table, but inconsistently noted in foot-note where referred to as Catawban family.)

>Dahcotas, Bancroft, Hist. U. S., III, 243, 1840.

>Dakotas, Hayden, Cont. Eth. and Phil. Missouri Ind., 232, 1862 (treats of Dakotas, Assiniboins, Crows, Minnitarees, Mandans, Omahas, Iowas).

>Dacotah, Keane, App. to Stanford's Comp. (Cent. and So. Am.), 460, 470, 1878. (The following are the main divisions given: Isaunties, Sissetons, Yantons, Teetons, Assiniboines, Winnebagos, Punkas, Omahas, Missouris, Iowas, Otoes, Kaws, Quappas, Osages, Upsarocas, Minnetarees.)

>Dakota, Berghaus, Physik. Atlas, map 72, 1887.

Derivation: A corruption of the Algonkin word "nadowe-ssi-wag, "the snake-like ones," "the enemies" (Trumbull).

Under the family Gallatin makes four subdivisions, viz, the Winnebagos, the Sioux proper and the Assiniboins, the Minnetare group, and the Osages and southern kindred tribes. Gallatin speaks of the distribution of the family as follows: The Winnebagoes have their principal seats on the Fox River of Lake Michigan and towards the heads of the Rock River of the Mississippi; of the Dahcotas proper, the Mendewahkantoan or "Gens du Lac" lived east of the Mississippi from Prairie du Chien north to Spirit Lake. The three others, Wahkpatoan, Wahkpakotoan and Sisitoans· inhabit the country between the Mississippi and the St. Peters, and that on the southern tributaries of this river and on the headwaters of the Red River of Lake Winnipek. The three western tribes, the Yanktons, the Yanktoanans and the Tetons wander between the Mississippi and the Missouri, extending southerly to 43° of north latitude and some distance west of the Missouri, between 43° and 47° of lati-

tude. The "Shyennes" are included in the family but are marked as doubtfully belonging here.

Owing to the fact that "Sioux" is a word of reproach and means snake or enemy, the term has been discarded by many later writers as a family designation, and "Dakota," which signifies friend or ally, has been employed in its stead. The two words are, however, by no means properly synonymous. The term "Sioux" was used by Gallatin in a comprehensive or family sense and was applied to all the tribes collectively known to him to speak kindred dialects of a widespread language. It is in this sense only, as applied to the linguistic family, that the term is here employed. The term "Dahcota" (Dakota) was correctly applied by Gallatin to the Dakota tribes proper as distinguished from the other members of the linguistic family who are not Dakotas in a tribal sense. The use of the term with this signification should be perpetuated.

It is only recently that a definite decision has been reached respecting the relationship of the Catawba and Woccon, the latter an extinct tribe known to have been linguistically related to the Catawba. Gallatin thought that he was able to discern some affinities of the Catawban language with "Muskhogee and even with Choctaw," though these were not sufficient to induce him to class them together. Mr. Gatschet was the first to call attention to the presence in the Catawba language of a considerable number of words having a Siouan affinity.

Recently Mr. Dorsey has made a critical examination of all the Catawba linguistic material available, which has been materially increased by the labors of Mr. Gatschet, and the result seems to justify its inclusion as one of the dialects of the widespread Siouan family.

GEOGRAPHIC DISTRIBUTION.

The pristine territory of this family was mainly in one body, the only exceptions being the habitats of the Biloxi, the Tutelo, the Catawba and Woccon.

Contrary to the popular opinion of the present day, the general trend of Siouan migration has been westward. In comparatively late prehistoric times, probably most of the Siouan tribes dwelt east of the Mississippi River.

The main Siouan territory extended from about 53° north in the Hudson Bay Company Territory, to about 33°, including a considerable part of the watershed of the Missouri River and that of the Upper Mississippi. It was bounded on the northwest, north, northeast, and for some distance on the east by Algonquian territory. South of 45° north the line ran eastward to Lake Michigan, as the Green Bay region belonged to the Winnebago.[1]

[1] See treaty of Prairie du Chien, 1825.

It extended westward from Lake Michigan through Illinois, crossing the Mississippi River at Prairie du Chien. At this point began the Algonquian territory (Sac, etc.) on the west side of the Mississippi, extending southward to the Missouri, and crossing that river it returned to the Mississippi at St. Louis. The Siouan tribes claimed all of the present States of Iowa and Missouri, except the parts occupied by Algonquian tribes. The dividing line between the two for a short distance below St. Louis was the Mississippi River. The line then ran west of Dunklin, New Madrid, and Pemiscot Counties, in Missouri, and Mississippi County and those parts of Craighead and Poinsett Counties, Arkansas, lying east of the St. Francis River. Once more the Mississippi became the eastern boundary, but in this case separating the Siouan from the Muskhogean territory. The Quapaw or Akansa were the most southerly tribe in the main Siouan territory. In 1673[1] they were east of the Mississippi. Joutel (1687) located two of their villages on the Arkansas and two on the Mississippi one of the latter being on the east bank, in our present State of Mississippi, and the other being on the opposite side, in Arkansas. Shea says[2] that the Kaskaskias were found by De Soto in 1540 in latitude 36°, and that the Quapaw were higher up the Mississippi. But we know that the southeast corner of Missouri and the northeast corner of Arkansas, east of the St. Francis River, belonged to Algonquian tribes. A study of the map of Arkansas shows reason for believing that there may have been a slight overlapping of habitats, or a sort of debatable ground. At any rate it seems advisable to compromise, and assign the Quapaw and Osage (Siouan tribes) all of Arkansas up to about 36° north.

On the southwest of the Siouan family was the Southern Caddoan group, the boundary extending from the west side of the Mississippi River in Louisiana, nearly opposite Vicksburg, Mississippi, and running northwestwardly to the bend of Red River between Arkansas and Louisiana; thence northwest along the divide between the watersheds of the Arkansas and Red Rivers. In the northwest corner of Indian Territory the Osages came in contact with the Comanche (Shoshonean), and near the western boundary of Kansas the Kiowa, Cheyenne, and Arapaho (the two latter being recent Algonquian intruders?) barred the westward march of the Kansa or Kaw.

The Pawnee group of the Caddoan family in western Nebraska and northwestern Kansas separated the Ponka and Dakota on the north from the Kansa on the south, and the Omaha and other Siouan tribes on the east from Kiowa and other tribes on the west. The Omaha and cognate peoples occupied in Nebraska the lower part of the Platte River, most of the Elkhorn Valley, and the Ponka claimed the region watered by the Niobrara in northern Nebraska.

[1] Marquette's Autograph Map.

[2] Disc. of Miss. Valley, p. 170, note.

There seems to be sufficient evidence for assigning to the Crows (Siouan) the northwest corner of Nebraska (i. e., that part north of the Kiowan and Caddoan habitats) and the southwest part of South Dakota (not claimed by Cheyenne[1]), as well as the northern part of Wyoming and the southern part of Montana, where they met the Shoshonean stock.[2]

The Biloxi habitat in 1699 was on the Pascogoula river,[3] in the southeast corner of the present State of Mississippi. The Biloxi subsequently removed to Louisiana, where a few survivors were found by Mr. Gatschet in 1886.

The Tutelo habitat in 1671 was in Brunswick County, southern Virginia, and it probably included Lunenburgh and Mecklenburg Counties.[4] The Earl of Bellomont (1699) says[5] that the Shateras were "supposed to be the Toteros, on Big Sandy River, Virginia," and Pownall, in his map of North America (1776), gives the Totteroy (i. e., Big Sandy) River. Subsequently to 1671 the Tutelo left Virginia and moved to North Carolina.[6] They returned to Virginia (with the Sapona), joined the Nottaway and Meherrin, whom they and the Tuscarora followed into Pennsylvania in the last century; thence they went to New York, where they joined the Six Nations, with whom they removed to Grand River Reservation, Ontario, Canada, after the Revolutionary war. The last full-blood Tutelo died in 1870. For the important discovery of the Siouan affinity of the Tutelo language we are indebted to Mr. Hale.

The Catawba lived on the river of the same name on the northern boundary of South Carolina. Originally they were a powerful tribe, the leading people of South Carolina, and probably occupied a large part of the Carolinas. The Woccon were widely separated from kinsmen living in North Carolina in the fork of the Cotentnea and Neuse Rivers.

The Wateree, living just below the Catawba, were very probably of the same linguistic connection.

PRINCIPAL TRIBES.

I. *Dakota.*

(A) Santee: include Mde'-wa-ka^{n}-to^{n}-wa^{n} (Spirit Lake village, Santee Reservation, Nebraska), and Wa-qpe'-ku-te (Leaf Shooters); some on Fort Peck Reservation, Montana.

[1] See Cheyenne treaty, in Indian Treaties, 1873, pp. 124, 5481–5489.

[2] Lewis and Clarke, Trav., Lond., 1807, p. 25. Lewis and Clarke, Expl., 1874, vol 2, p. 390. A. L. Riggs, MS. letter to Dorsey, 1876 or 1877. Dorsey, Ponka tradition: "The Black Hills belong to the Crows." That the Dakotas were not there till this century see Corbusier's Dakota Winter Counts, in 4th Rept. Bur. Eth., p. 130, where it is also said that the Crow were the original owners of the Black Hills.

[3] Margry, Découvertes, vol. 4, p. 195.

[4] Batts in Doc. Col. Hist. N. Y., 1853, vol. 3, p. 194. Harrison, MS. letter to Dorsey, 1886.

[5] Doc. Col. Hist. N. Y., 1854, vol. 4, p. 485.

[6] Lawson, Hist. Carolina, 1714; reprint of 1860, p. 384.

I. *Dakota*—Continued.

(B) Sisseton (Si-si′-to^{n}-wa^{n}), on Sisseton Reservation, South Dakota, and part on Devil's Lake Reservation, North Dakota.

(C) Wahpeton (Wa-qpe′-to^{n}-wa^{n}, Wa-ȟpe-ton-wan); Leaf village. Some on Sisseton Reservation; most on Devil's Lake Reservation.

(D) Yankton (I-haȟk′-to^{n}-wa^{n}), at Yankton Reservation, South Dakota.

(E) Yanktonnais (I-haȟk′-to^{n}-wa^{n}′-na); divided into *Upper* and *Lower*. Of the *Upper Yanktonnais*, there are some of the *Cut-head band* (Pa′-ba-ksa gens) on Devil's Lake Reservation. *Upper Yanktonnais*, most are on Standing Rock Reservation, North Dakota; *Lower Yanktonnais*, most are on Crow Creek Reservation, South Dakota, some are on Standing Rock Reservation, and some on Fort Peck Reservation, Montana.

(F) Teton (Ti-to^{n}-wa^{n}); some on Fort Peck Reservation, Montana.

(*a*) *Brulé* (Si-tca^{n}′-xu); some are on Standing Rock Reservation. Most of the *Upper Brulé* (Highland Sitca^{n}xu) are on Rosebud Reservation, South Dakota. Most of the *Lower Brulé* (Lowland Sitca^{n}xu) are on Lower Brulé Reservation, South Dakota.

(*b*) *Sans Arcs* (I-ta′-zip-tco′, Without Bows). Most are on Cheyenne Reservation, South Dakota; some on Standing Rock Reservation.

(*c*) *Blackfeet* (Si-ha′sa′-pa). Most are on Cheyenne Reservation; some on Standing Rock Reservation.

(*d*) *Minneconjou* (Mi′-ni-ko′-o-ju). Most are on Cheyenne Reservation, some are on Rosebud Reservation, and some on Standing Rock Reservation.

(*e*) *Two Kettles* (O-o′-he-no^{n}′-pa, Two Boilings), on Cheyenne Reservation.

(*f*) *Ogalalla* (O-gla′-la). Most on Pine Ridge Reservation, South Dakota; some on Standing Rock Reservation. *Wa-ża-ża* (Wa-ja-ja, Wa-zha-zha), a gens of the Oglala (Pine Ridge Reservation); *Loafers* (Wa-glu-xe, In-breeders), a gens of the Oglala; most on Pine Ridge Reservation; some on Rosebud Reservation.

(*g*) *Uncpapa* (1862–'63), *Uncapapa* (1880–'81), (Huñ′-kpa-pa), on Standing Rock Reservation.

II. *Assinaboin* (Hohe, Dakota name); most in British North America; some on Fort Peck Reservation, Montana.

III. *Omaha* (U-ma^{n}′-ha^{n}), on Omaha Reservation, Nebraska.

IV. *Ponca* (formerly *Ponka* on maps; Ponka); 605 on Ponca Reservation, Indian Territory; 217 at Santee Agency, Nebraska.

V. *Kaw* (ꞁa^{n}'-ze; the Kansa Indians); on the Kansas Reservation, Indian Territory.

VI. *Osage; Big Osage* (Pa-he'-tsi, Those on a Mountain); *Little Osage* (Those at the foot of the Mountain); *Arkansas Band* (ʂan-ʇsu-ꞁɕi^{n}, Dwellers in a Highland Grove), Osage Reservation, Indian Territory.

VII. *Quapaw* (U-ꞁa'-qpa; Kwapa). A few are on the Quapaw Reserve, but about 200 are on the Osage Reserve, Oklahoma. (They are the *Arkansa* of early times.)

VIII. *Iowa*, on Great Nemaha Reserve, Kansas and Nebraska, and 86 on Sac and Fox Reserve, Indian Territory.

IX. *Otoe* (Wa-to'-qta-ta), on Otoe Reserve, Indian Territory.

X. *Missouri* or *Missouria* (Ni-u'-t'a-tci), on Otoe Reserve.

XI. *Winnebago* (Ho-tcañ'-ga-ra); most in Nebraska, on their reserve; some are in Wisconsin; some in Michigan, according to Dr. Reynolds.

XII. *Mandan*, on Fort Berthold Reserve, North Dakota.

XIII. *Gros Ventres* (a misleading name; syn. *Minnetaree;* Hi-da'-tsa); on the same reserve.

XIV. *Crow* (Absáruqe, Aubsároke, etc.), Crow Reserve, Montana.

XV. *Tutelo* (Ye-sa^{n}'), among the Six Nations, Grand River Reserve, Province of Ontario, Canada.

XVI. *Biloxi* (Ta'-neks ha'-ya), part on the Red River, at Avoyelles, Louisiana; part in Indian Territory, among the Choctaw and Caddo.

XVII. *Catawba.*

XVIII. *Woccon.*

Population.—The present number of the Siouan family is about 43,400, of whom about 2,204 are in British North America, the rest being in the United States. Below is given the population of the tribes officially recognized, compiled chiefly from the Canadian Indian Report for 1888, the United States Indian Commissioner's Report for 1889, and the United States Census Bulletin for 1890:

Dakota:		
Mdewakantonwan and Wahpekute (Santee) on Santee Reserve, Nebraska		869
At Flandreau, Dakota		292
Santee at Devil's Lake Agency		54
Sisseton and Wahpeton on Sisseton Reserve, South Dakota		1,522
Sisseton, Wahpeton, and Cuthead (Yanktonnais) at Devil's Lake Reservation		857
Yankton:		
On Yankton Reservation, South Dakota	1,725	
At Devil's Lake Agency	123	
On Fort Peck Reservation, Montana	1,121	
A few on Crow Creek Reservation, South Dakota	10	
A few on Lower Brulé Reservation, South Dakota	10	
		2,989

Dakota—Continued.		
Yanktonnais:		
Upper Yanktonnais on Standing Rock Reservation	1,786	
Lower Yanktonnais on Crow Creek Reservation	1,058	
At Standing Rock Agency	1,739	
		4,583
Teton:		
Brulé. Upper Brulé on Rosebud Reservation	3,245	
On Devil's Lake Reservation	2	
Lower Brulé at Crow Creek and Lower Brulé Agency	1,026	
Minneconjou (mostly)and Two Kettle, on Cheyenne River Reserve	2,823	
Blackfeet on Standing Rock Reservation	545	
Two Kettle on Rosebud Reservation	315	
Oglala on Pine Ridge Reservation	4,552	
Wajaja (Oglala gens) on Rosebud Reservation	1,825	
Wagluxe (Oglala gens) on Rosebud Reservation	1,353	
Uncapapa, on Standing Rock Reservation	571	
Dakota at Carlisle, Lawrence, and Hampton schools	169	
		16,426
Dakota in British North America (tribes not stated):		
On Bird Tail Sioux Reserve, Birtle Agency, Northwest Territory	108	
On Oak River Sioux Reserve, Birtle Agency	276	
On Oak Lake Sioux Reserve, Birtle Agency	55	
On Turtle Mountain Sioux Reserve, Birtle Agency	34	
On Standing Buffalo Reserve, under Northwest Territory	184	
Muscowpetung's Agency :		
White Cap Dakota (Moose Woods Reservation)	105	
American Sioux (no reserve)	95	
		857
Assinaboin:		
On Fort Belknap Reservation, Montana	952	
On Fort Peck Reservation, Montana	719	
At Devil's Lake Agency	2	
The following are in British North America:		
Pheasant Rump's band, at Moose Mountain (of whom 6 at Missouri and 4 at Turtle Mountain)	69	
Ocean Man's band, at Moose Mountain (of whom 4 at Missouri)	68	
The-man-who-took-the-coat's band, at Indian Head (of whom 5 are at Milk River)	248	
Bear's Head band, Battleford Agency	227	
Chee-pooste-quahn band, at Wolf Creek, Peace Hills Agency	128	
Bear's Paw band, at Morleyville	236	
Chiniquy band, Reserve, at Sarcee Agency	134	
Jacob's band	227	
		3,008
Omaha:		
Omaha and Winnebago Agency, Nebraska	1,158	
At Carlisle School, Pennsylvania	19	
At Hampton School, Virginia	10	
At Lawrence School, Kansas	10	
		1,197
Ponka:		
In Nebraska (under the Santee agent)	217	
In Indian Territory (under the Ponka agent)	605	
At Carlisle, Pennsylvania	1	
At Lawrence, Kansas	24	
		847

Osage:		
At Osage Agency, Indian Territory	1,509	
At Carlisle, Pennsylvania	7	
At Lawrence, Kansas	65	
		1,581
Kansa or Kaw:		
At Osage Agency, Indian Territory	198	
At Carlisle, Pennsylvania	1	
At Lawrence, Kansas	15	
		214
Quapaw:		
On Quapaw Reserve, Indian Territory	154	
On Osage Reserve, Indian Territory	71	
At Carlisle, Pennsylvania	3	
At Lawrence, Kansas	4	
		232
Iowa:		
On Great Nemaha Reservation, Kansas	165	
On Sac and Fox Reservation, Oklahoma	102	
At Carlisle, Pennsylvania	1	
At Lawrence, Kansas	5	
		273
Oto and Missouri, in Indian Territory		358
Winnebago:		
In Nebraska	1,215	
In Wisconsin (1889)	930	
At Carlisle, Pennsylvania	27	
At Lawrence, Kansas	2	
At Hampton, Virginia	10	
		2,184
Mandan:		
On Fort Berthold Reservation, North Dakota	251	
At Hampton, Virginia	1	
		252
Hidatsa, on Fort Berthold Reservation, North Dakota		522
Crow, on Crow Reservation, Montana		2,287
Tutelo, about a dozen mixed bloods on Grand River Reserve, Ontario, Canada. and a few more near Montreal (?), say, about		20
Biloxi:		
In Louisiana, about	25	
At Atoka, Indian Territory	1	
		26
Catawba:		
In York County, South Carolina, about	80	
Scattered through North Carolina, about	40?	
		120?

SKITTAGETAN FAMILY.

>Skittagets, Gallatin in Trans. and Coll. Am. Eth. Soc., II, pt. 1, c, 1848 (the equivalent of his Queen Charlotte's Island group, p. 77).

>Skittagetts, Berghaus, Physik. Atlas, map 17, 1852.

>Skidegattz, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (obvious typographical error; Queen Charlotte Island).

×Haidah, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 224, 1841 (same as his Northern family; see below).

=Haidah, Latham, Nat. Hist. Man, 300, 1850 (Skittegats, Massets, Kumshahas, Kyganie). Latham in Trans. Philolog. Soc. Lond., 72, 1856 (includes Skittigats, Massetts, Kumshahas, and Kyganie of Queen Charlotte's Ids. and Prince of Wales Archipelago). Latham, Opuscula, 339, 1860. Buschmann, Spuren der aztek. Sprache, 673, 1859. Latham, El. Comp. Phil., 401, 1862 (as in 1856). Dall in Proc. Am. Ass'n, 269, 1869 (Queen Charlotte's Ids. and southern part of Alexander Archipelago). Bancroft, Nat. Races, III, 564, 604, 1882.

>Hai-dai, Schoolcraft, Ind. Tribes. v, 489, 1855. Kane, Wanderings of an Artist, app., 1859, (Work's census, 1836-'41, of northwest coast tribes, classified by language).

=Haida, Gibbs in Cont. N. A. Eth., I, 135, 1877. Tolmie and Dawson, Comp. Vocabs., 15, 1884 (vocabs. of Kaigani Sept, Masset, Skidegate, Kumshiwa dialects; also map showing distribution). Dall in Proc. Am. Ass'n, 375, 1885 (mere mention of family).

<Hydahs, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 473, 1878 (enumerates Massets, Klue, Kiddan, Ninstance, Skid-a-gate, Skid-a-gatees, Cum-she-was, Kaiganies, Tsimsheeans, Nass, Skeenas, Sebasses, Hailtzas, Bellacoolas).

>Queen Charlotte's Island, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 15, 306, 1836 (no tribe indicated). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848 (based on Skittagete language). Latham in Jour. Eth. Soc. Lond., I, 154, 1848. Latham, Opuscula, 249, 1860.

×Northern, Scouler in Jour. Roy. Geog. Soc. Lond., XI, 219, 1841 (includes Queen Charlotte's Island and tribes on islands and coast up to 60° N. L.; Haidas, Massettes, Skittegás, Cumshawás). Prichard, Phys. Hist. Mankind, V, 433, 1847 (follows Scouler).

=Kygáni, Dall in Proc. Am. Ass'n, 269, 1869 (Queen Charlotte's Ids. or Haidahs).

×Nootka, Bancroft, Nat. Races, III, 564, 1882 (contains Quane, probably of present family; Quactoe, Saukaulutuck).

The vocabulary referred by Gallatin[1] to "Queen Charlotte's Islands" unquestionably belongs to the present family. In addition to being a compound word and being objectionable as a family name on account of its unwieldiness, the term is a purely geographic one and is based upon no stated tribe; hence it is not eligible for use in systematic nomenclature. As it appears in the Archæologia Americana it represents nothing but the locality whence the vocabulary of an unknown tribe was received.

The family name to be considered as next in order of date is the Northern (or Haidah) of Scouler, which appears in volume XI, Royal Geographical Society, page 218, et seq. The term as employed by Scouler is involved in much confusion, and it is somewhat difficult to determine just what tribes the author intended to cover by the designation. Reduced to its simplest form, the case stands as follows: Scouler's primary division of the Indians of the Northwest was into two groups, the insular and the inland. The insular (and coast tribes) were then subdivided into two families, viz, Northern or Haidah family (for the terms are interchangeably used, as on page 224) and the Southern or Nootka-Columbian family. Under the Northern or Haidah family the author classes all the Indian tribes

[1]Archæologia Americana, 1836, II, pp. 15, 306.

in the Russian territory, the Kolchians (Athapascas of Gallatin, 1836), the Koloshes, Ugalentzes, and Tun Ghaase (the Koluscans of Gallatin, 1836); the Atnas (Salish of Gallatin, 1836); the Kenaians (Athapascas, Gallatin, 1836); the Haidah tribes proper of Queen Charlotte Island, and the Chimesyans.

It will appear at a glance that such a heterogeneous assemblage of tribes, representing as they do several distinct stocks, can not have been classed together on purely linguistic evidence. In point of fact, Scouler's remarkable classification seems to rest only in a very slight degree upon a linguistic basis, if indeed it can be said to have a linguistic basis at all. Consideration of "physical character, manners, and customs" were clearly accorded such weight by this author as to practically remove his Northern or Haidah family from the list of linguistic stocks.

The next family name which was applied in this connection is the Skittagets of Gallatin as above cited. This name is given to designate a family on page *c*, volume II, of Transactions of the Ethnological Society, 1848. In his subsequent list of vocabularies, page 77, he changes his designation to Queen Charlotte Island, placing under this family name the Skittagete tribe. His presentation of the former name of Skittagets in his complete list of families is, however, sufficiently formal to render it valid as a family designation, and it is, therefore, retained for the tribes of the Queen Charlotte Archipelago which have usually been called Haida.

From a comparison of the vocabularies of the Haida language with others of the neighboring Koluschan family, Dr. Franz Boas is inclined to consider that the two are genetically related. The two languages possess a considerable number of words in common, but a more thorough investigation is requisite for the settlement of the question than has yet been given. Pending this the two families are here treated separately.

GEOGRAPHIC DISTRIBUTION.

The tribes of this family occupy Queen Charlotte Islands, Forrester Island to the north of the latter, and the southeastern part of Prince of Wales Island, the latter part having been ascertained by the agents of the Tenth Census.[1]

PRINCIPAL TRIBES.

The following is a list of the principal villages:

Haida:

Aseguang.	Kunχit.	Skiteiget.
Cumshawa.	Massett.	Tanu.
Kayung.	New Gold Harbor.	Tartanee.
Kung.	Skedan.	Uttewas.

[1] See Petroff map of Alaska, 1880–'81.

Kaigani:

Chatcheeni.	Howakan.	Shakan.
Clickass.	Quiahanless.	

Population.—The population of the Haida is 2,500, none of whom are at present under an agent.

TAKILMAN FAMILY.

=Takilma, Gatschet in Mag. Am. Hist., 1882 (Lower Rogue River).

This name was proposed by Mr. Gatschet for a distinct language spoken on the coast of Oregon about the lower Rogue River. Mr. Dorsey obtained a vocabulary in 1884 which he has compared with Athapascan, Kusan, Yakonan, and other languages spoken in the region without finding any marked resemblances. The family is hence admitted provisionally. The language appears to be spoken by but a single tribe, although there is a manuscript vocabulary in the Bureau of Ethnology exhibiting certain differences which may be dialectic.

GEOGRAPHIC DISTRIBUTION.

The Takilma formerly dwelt in villages along upper Rogue River, Oregon, all the latter, with one exception, being on the south side, from Illinois River on the southwest, to Deep Rock, which was nearer the head of the stream. They are now included among the "Rogue River Indians," and they reside to the number of twenty-seven on the Siletz Reservation, Tillamook County, Oregon, where Dorsey found them in 1884.

TAÑOAN FAMILY.

>Tay-waugh, Lane (1854) in Schoolcraft, Ind. Tribes, v, 689, 1855 (Pueblos of San Juan, Santa Clara, Pojuaque, Nambe, San Il de Conso, and one Moqui pueblo). Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878.

>Taño, Powell in Rocky Mountain Presbyterian, Nov., 1878 (includes Sandia, Téwa, San Ildefonso, San Juan, Santa Clara, Pojoaque, Nambé, Tesuque, Śinecú, Jemez, Taos, Picuri).

>Tegua, Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878 (includes S. Juan, Sta. Clara, Pojuaque, Nambe, Tesugue, S. Ildefonso, Haro).

=Téwan, Powell in Am. Nat., 605, Aug., 1880 (makes five divisions: 1. Taño (Isleta, Isleta near El Paso, Sandía); 2. Taos (Taos, Picuni); 3. Jemes (Jemes); 4. Tewa or Tehua (San Ildefonso, San Juan, Pojoaque, Nambe, Tesuque, Santa Clara, and one Moki pueblo): 5. Piro).

>E-nagh-magh, Lane (1854) in Schoolcraft, Ind. Tribes, v, 689, 1855 (includes Taos, Vicuris, Zesuqua, Sandia, Ystete, and two pueblos near El Paso, Texas). Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878 (follows Lane, but identifies Texan pueblos with Lentis? and Socorro?).

>Picori, Keane, App. Stanford's Comp. (Cent. and So. Am.), 479, 1878 (or Enaghmagh).

=Stock of Rio Grande Pueblos, Gatschet in U. S. Geog. Surv. W. 100th M., VII, 415, 1879.

=Rio Grande Pueblo, Gatschet in Mag. Am. Hist., 258, 1882.

Derivation: Probably from "taínin," plural of tá-ide, "Indian," in the dialect of Isleta and Sandia (Gatschet).

In a letter[1] from Wm. Carr Lane to H. R. Schoolcraft, appear some remarks on the affinities of the Pueblo languages, based in large part on hearsay evidence. No vocabularies are given, nor does any real classification appear to be attempted, though referring to such of his remarks as apply in the present connection, Lane states that the Indians of "Taos, Vicuris, Zesuqua, Sandia, and Ystete, and of two pueblos of Texas, near El Paso, are said to speak the same language, which I have heard called E-nagh-magh," and that the Indians of "San Juan, Santa Clara, Pojuaque, Nambe, San Il de Conso, and one Moqui pueblo, all speak the same language, as it is said: this I have heard called Tay-waugh." The ambiguous nature of his reference to these pueblos is apparent from the above quotation.

The names given by Lane as those he had "heard" applied to certain groups of pueblos which "it is said" speak the same language, rest on too slender a basis for serious consideration in a classificatory sense.

Keane in the appendix to Stanford's Compendium (Central and South America), 1878, p. 479, presents the list given by Lane, correcting his spelling in some cases and adding the name of the Tusayan pueblo as Haro (Hano). He gives the group no formal family name, though they are classed together as speaking "Tegua or Tay-waugh."

The Taño of Powell (1878), as quoted, appears to be the first name formally given the family, and is therefore accepted. Recent investigations of the dialect spoken at Taos and some of the other pueblos of this group show a considerable body of words having Shoshonean affinities, and it is by no means improbable that further research will result in proving the radical relationship of these languages to the Shoshonean family. The analysis of the language has not yet, however, proceeded far enough to warrant a decided opinion.

GEOGRAPHIC DISTRIBUTION.

The tribes of this family in the United States resided exclusively upon the Rio Grande and its tributary valleys from about 33° to about 36°. A small body of these people joined the Tusayan in northern Arizona, as tradition avers to assist the latter against attacks by the Apache—though it seems more probable that they fled from the Rio Grande during the pueblo revolt of 1680—and remained to found the permanent pueblo of Hano, the seventh pueblo of the group. A smaller section of the family lived upon the Rio Grande in Mexico and Texas, just over the New Mexico border.

[1] Schoolcraft, Indian Tribes, 1855, vol. 5, p. 689.

Population.—The following pueblos are included in the family, with a total population of about 3,237:

Hano (of the Tusayan group)	132	Sandia	140
Isleta (New Mexico)	1,059	San Ildefonso	148
Isleta (Texas)	few	San Juan	406
Jemez	428	Santa Clara	225
Nambé	79	Senecú (below El Paso)	few
Picuris	100	Taos	409
Pojoaque	20	Tesuque	91

TIMUQUANAN FAMILY.

=Timuquana, Smith in Hist. Magazine, II, 1, 1858 (a notice of the language with vocabulary; distinctness of the language affirmed). Brinton, Floridian Peninsula, 134, 1859 (spelled also Timuaca, Timagoa, Timuqua).

=Timucua, Gatschet in Proc. Am. Phil. Soc., XVI, April 6, 1877 (from Cape Cañaveral to mouth of St. John's River). Gatschet, Creek Mig. Legend I, 11–13, 1884. Gatschet in Science, 413, April 29, 1887.

=Atimuca, Gatschet in Science, ibid. (proper name).

Derivation: From ati-muca, "ruler," "master;" literally, "servants attend upon him."

In the Historical Magazine as above cited appears a notice of the Timuquana language by Buckingham Smith, in which is affirmed its distinctness upon the evidence of language. A short vocabulary is appended, which was collated from the "Confessionario" by Padre Pareja, 1613. Brinton and Gatschet have studied the Timuquana language and have agreed as to the distinctness of the family from any other of the United States. Both the latter authorities are inclined to take the view that it has affinities with the Carib family to the southward, and it seems by no means improbable that ultimately the Timuquana language will be considered an offshoot of the Carib linguistic stock. At the present time, however, such a conclusion would not be justified by the evidence gathered and published.

GEOGRAPHIC DISTRIBUTION.

It is impossible to assign definite limits to the area occupied by the tribes of this family. From documentary testimony of the sixteenth and seventeenth centuries the limits of the family domain appear to have been about as follows: In general terms the present northern limits of the State of Florida may be taken as the northern frontier, although upon the Atlantic side Timuquanan territory may have extended into Georgia. Upon the northwest the boundary line was formed in De Soto's time by the Ocilla River. Lake Okeechobee on the south, or as it was then called Lake Sarrape or Mayaimi, may be taken as the boundary between the Timuquanan tribes proper and the Calusa province upon the Gulf coast and the Tegesta province upon the Atlantic side. Nothing whatever of the languages

spoken in these two latter provinces is available for comparison. A number of the local names of these provinces given by Fontanedo (1559) have terminations similar to many of the Timuquanan local names. This slender evidence is all that we have from which to infer the Timuquanan relationship of the southern end of the peninsula.

PRINCIPAL TRIBES.

The following settlements appear upon the oldest map of the regions we possess, that of De Bry (Narratio; Frankf. a. M. 15, 1590):

(A) Shores of St. John's River, from mouth to sources:

Patica.
Saturiwa.
Atore.
Homolua or Molua.
Alimacani.
Casti.
Malica.
Melona.
Timoga or Timucua.
Enecaqua.
Choya.
Edelano (island).
Astina.
Utina.
Patchica.
Chilili.
Calanay.
Onochaquara.
Mayarca.
Mathiaca.
Maiera.
Mocoso.
Cadica.
Eloquale.
Aquonena.

(B) On a (fictitious) western tributary of St. John's River, from mouth to source:

Hicaranaou.
Appalou.
Oustaca.
Onathcaqua.
Potanou.
Ehiamana.
Anouala.

(C) East Floridian coast, from south to north:

Mocossou.
Oathcaqua.
Sorrochos.
Hanocoroucouay.
Marracou.

(D) On coast north of St. John's River:

Hiouacara.

(E) The following are gathered from all other authorities, mostly from the accounts of De Soto's expedition:

Acquera.
Aguile.
Basisa or Vacissa (1688).
Cholupaha.
Hapaluya.
Hirrihiqua.
Itafi (perhaps a province).
San Mateo (1688).
Santa Lucia de Acuera (SE. coast).
Tacatacuru.
Tocaste.
Tolemato.
Topoqui.

Itara
Machaua (1688).
Napetuca.
Osile (Oxille).
San Juan de Guacara (1688).
Tucururu (SE. coast)
Ucita.
Urriparacuxi.
Yupaha (perhaps a province).

TONIKAN FAMILY.

=Tunicas, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 115, 116, 1836 (quotes Dr. Sibley, who states they speak a distinct language). Latham, Nat. Hist. Man, 341, 1850 (opposite mouth of Red River; quotes Dr. Sibley as to distinctness of language).

=Tonica, Gatschet, Creek Mig. Legend, I, 39, 1884 (brief account of tribe).

=Tonika, Gatschet in Science, 412, April 29, 1887 (distinctness as a family asserted; the tribe calls itself Túniχka).

Derivation: From the Tonika word óni, "man," "people;" t- is a prefix or article; -ka,-χka a nominal suffix.

The distinctness of the Tonika language, has long been suspected, and was indeed distinctly stated by Dr. Sibley in 1806.[1] The statement to this effect by Dr. Sibley was quoted by Gallatin in 1836, but as the latter possessed no vocabulary of the language he made no attempt to classify it. Latham also dismisses the language with the same quotation from Sibley. Positive linguistic proof of the position of the language was lacking until obtained by Mr. Gatschet in 1886, who declared it to form a family by itself.

GEOGRAPHIC DISTRIBUTION.

The Tonika are known to have occupied three localities: First, on the Lower Yazoo River (1700); second, east shore of Mississippi River (about 1704); third, in Avoyelles Parish, Louisiana (1817). Near Marksville, the county seat of that parish, about twenty-five are now living.

TONKAWAN FAMILY.

=Tonkawa, Gatschet, Zwölf Sprachen aus dem Südwesten Nordamerikas, 76, 1876 (vocabulary of about 300 words and some sentences). Gatschet, Die Sprache der Tonkawas, in Zeitschrift für Ethnologie, 64, 1877. Gatschet (1876), in Proc. Am. Philosoph. Soc., XVI, 318, 1877.

Derivation: the full form is the Caddo or Wako term tonkawéya, "they all stay together" (wéya, "all").

After a careful examination of all the linguistic material available for comparison, Mr. Gatschet has concluded that the language spoken by the Tonkawa forms a distinct family.

[1] President's message, February 19, 1806.

GEOGRAPHIC DISTRIBUTION.

The Tónkawa were a migratory people and a *colluvies gentium*, whose earliest habitat is unknown. Their first mention occurs in 1719; at that time and ever since they roamed in the western and southern parts of what is now Texas. About 1847 they were engaged as scouts in the United States Army, and from 1860–'62 (?) were in the Indian Territory; after the secession war till 1884 they lived in temporary camps near Fort Griffin, Shackelford County, Texas, and in October, 1884, they removed to the Indian Territory (now on Oakland Reserve). In 1884 there were seventy-eight individuals living; associated with them were nineteen Lipan Apache, who had lived in their company for many years, though in a separate camp. They have thirteen divisions (partly totem-clans) and observe mother-right.

UCHEAN FAMILY.

=Uchees, Gallatin in Trans. and Coll. Am. Antiq. Soc., II., 95, 1836 (based upon the Uchees alone). Bancroft, Hist. U. S., III., 247, 1840. Gallatin in Trans. Am. Eth. Soc. II., pt. 1, xcix, 77, 1848. Keane, App. Stanford's Comp. (Cent. and So. Am.), 472, 1878 (suggests that the language may have been akin to Natchez).

=Utchees, Gallatin in Trans. and Coll, Am. Antiq. Soc., II., 306, 1836. Gallatin in Schoolcraft, Ind. Tribes, III., 401, 1853. Keane, App. Stanford's Comp. (Cent. and So. Am.), 472, 1878.

=Utschies, Berghaus (1845), Physik. Atlas, map 17, 1848. Ibid., 1852.

=Uché, Latham, Nat. Hist. Man, 338, 1850 (Coosa River). Latham in Trans. Philolog. Soc. Lond., II., 31–50, 1846. Latham, Opuscula, 293, 1860.

=Yuchi, Gatschet, Creek Mig. Legend, I, 17, 1884. Gatschet in Science, 413, April 29, 1887.

The following is the account of this tribe given by Gallatin (probably derived from Hawkins) in Archæologia Americana, page 95:

The original seats of the Uchees were east of Coosa and probably of the Chatahoochee; and they consider themselves as the most ancient inhabitants of the country. They may have been the same nation which is called Apalaches in the accounts of De Soto's expedition, and their towns were till lately principally on Flint River.

GEOGRAPHIC DISTRIBUTION.

The pristine homes of the Yuchi are not now traceable with any degree of certainty. The Yuchi are supposed to have been visited by De Soto during his memorable march, and the town of Cofitachiqui chronicled by him, is believed by many investigators to have stood at Silver Bluff, on the left bank of the Savannah, about 25 miles below Augusta. If, as is supposed by some authorities, Cofitachiqui was a Yuchi town, this would locate the Yuchi in a section which, when first known to the whites, was occupied by the Shawnee. Later the Yuchi appear to have lived somewhat farther down the Savannah, on the eastern and also the western side, as far as the Ogeechee River, and also upon tracts above and below Augusta, Georgia. These tracts were claimed by them as late as 1736.

In 1729 a portion of the Yuchi left their old seats and settled among the Lower Creek on the Chatahoochee River; there they established three colony villages in the neighborhood, and later on a Yuchi settlement is mentioned on Lower Tallapoosa River, among the Upper Creek.[1] Filson[2] gives a list of thirty Indian tribes and a statement concerning Yuchi towns, which he must have obtained from a much earlier source: "Uchees occupy four different places of residence—at the head of St. John's, the fork of St. Mary's, the head of Cannouchee, and the head of St. Tillis" (Satilla), etc.[3]

Population.—More than six hundred Yuchi reside in northeastern Indian Territory, upon the Arkansas River, where they are usually classed as Creek. Doubtless the latter are to some extent intermarried with them, but the Yuchi are jealous of their name and tenacious of their position as a tribe.

WAIILATPUAN.

= Waiilatpu, Hale, in U. S. Expl. Exp., VI, 199, 214, 569, 1846 (includes Cailloux or Cayuse or Willetpoos, and Molele). Gallatin, after Hale, in Trans. Am. Eth. Soc., II, pt. 1, c, 14, 56, 77, 1848 (after Hale). Berghaus (1851), Physik. Atlas, map 17, 1852. Buschmann, Spuren der aztek. Sprache, 628, 1859. Bancroft, Nat. Races, III, 565, 1882 (Cayuse and Mollale).

= Wailatpu, Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (Cayuse and Molele).

× Sahaptin, Latham, Nat. Hist. Man, 323, 1850 (cited as including Cayús ?).

× Sahaptins, Keane, App. Stanford's Comp. (Cent. and So. Am.), 474, 1878 (cited because it includes Cayuse and Mollale).

= Molele, Latham, Nat. Hist. Man, 324, 1850 (includes Molele, Cayús?).

> Cayús?, Latham, ibid.

= Cayuse, Gatschet in Mag. Am. Hist., 166, 1877 (Cayuse and Moléle). Gatschet in Beach, Ind. Misc., 442, 1877.

Derivation: Wayíletpu, plural form of Wa-ílet, "one Cayuse man" (Gatschet).

Hale established this family and placed under it the Cailloux or Cayuse or Willetpoos, and the Molele. Their headquarters as indicated by Hale are the upper part of the Walla Walla River and the country about Mounts Hood and Vancouver.

GEOGRAPHIC DISTRIBUTION.

The Cayuse lived chiefly near the mouth of the Walla Walla River, extending a short distance above and below on the Columbia, between the Umatilla and Snake Rivers. The Molále were a mountain tribe and occupied a belt of mountain country south of the Columbia River, chiefly about Mounts Hood and Jefferson.

PRINCIPAL TRIBES.

Cayuse. Molále.

[1] Gatschet, Creek Mig. Legend, I, 21–22, 1884.

[2] Discovery, etc., of Kentucky, 1793, II, 84–7.

[3] Gatschet, Creek Mig. Legend, I, p. 20.

Population.—There are 31 Molále now on the Grande Ronde Reservation, Oregon,[1] and a few others live in the mountains west of Klamath Lake. The Indian Affairs Report for 1888 credits 401 and the United States Census Bulletin for 1890, 415 Cayuse Indians to the Umatilla Reservation, but Mr. Henshaw was able to find only six old men and women upon the reservation in August, 1888, who spoke their own language. The others, though presumably of Cayuse blood, speak the Umatilla tongue.

WAKASHAN FAMILY.

>Wakash, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 15, 306, 1836 (of Nootka Sound; gives Jewitt's vocab.). Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848 (based on Newittee). Berghaus (1851), Physik. Atlas, map 17, 1852. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (includes Newittee and Nootka Sound). Latham in Trans. Philolog. Soc. Lond., 73, 1856 (of Quadra and Vancouver's Island). Latham, Opuscula, 340, 1860. Latham, El. Comp. Phil., 403, 1862 (Tlaoquatsh and Wakash proper; Nútka and congeners also referred here).

×Wakash, Latham, Nat. Hist. Man, 301, 1850 (includes Naspatle, proper Nutkans, Tlaoquatsh, Nittenat, Klasset, Klallems; the last named is Salishan).

×Nootka-Columbian, Scouler in Jour. Roy. Geog. Soc., XI, 221, 1841 (includes Quadra and Vancouver Island, Haeeltzuk, Billechoola, Tlaoquatch, Kawitchen, Noosdalum, Squallyamish, Cheenooks). Prichard, Phys. Hist. Mankind, V, 435, 1847 (follows Scouler). Latham in Jour. Eth. Soc. Lond., I, 162, 1848 (remarks upon Scouler's group of this name). Latham, Opuscula, 257, 1860 (the same).

<Nootka, Hale in U. S. Expl. Exp., VI, 220, 569, 1846 (proposes family to include tribes of Vancouver Island and tribes on south side of Fuca Strait).

>Nutka, Buschmann, Neu-Mexico, 329, 1858.

>Nootka, Gatschet in Mag. Am. Hist., 170, 1877 (mentions only Makah, and Classet tribes of Cape Flattery). Gatschet in Beach, Ind. Misc., 446, 1877.

×Nootkahs, Keane, App. Stanford's Comp. (Cent. and So. Am.), 473, 1878 (includes Muchlahts, Nitinahts, Ohyahts, Manosahts, and Quoquoulths of present family, together with a number of Salishan tribes).

×Nootka, Bancroft, Nat. Races, III, 564, 607, 1882 (a heterogeneous group, largely Salishan, with Wakashan, Skittagetan, and other families represented).

>Straits of Fuca, Gallatin in Trans. and Coll. Am. Antiq. Soc., II, 134, 306, 1836 (vocabulary of, referred here with doubt; considered distinct by Gallatin).

×Southern, Scouler in Jour. Roy. Geog. Soc., XI, 224, 1841 (same as his Nootka-Columbian above).

×Insular, Scouler ibid. (same as his Nootka-Columbian above).

×Haeltzuk, Latham in Jour. Eth. Soc. Lond., I, 155, 1848 (cities Tolmie's vocab. Spoken from 50° 30′ to 53° 30′ N. L.). Latham, Opuscula, 251, 1860 (the same).

>Haeeltsuk and Hailtsa, Latham, Nat. Hist. Man, 300, 1850 (includes Hyshalla, Hyhysh, Esleytuk, Weekenoch, Nalatsenoch, Quagheuil. Tlatla-Shequilla, Lequeeltoch).

>Hailtsa, Latham in Trans. Philolog. Soc. Lond., 72, 1856. Buschmann, Neu-Mexico, 322, 1858. Latham, Opuscula, 339, 1860. Latham, El. Comp. Phil., 401, 1862 (includes coast dialects between Hawkesbury Island, Broughton's Archipelago, and northern part of Vancouver Island).

>Ha-eelb-zuk, Schoolcraft, Ind. Tribes, V, 487, 1855. Kane, Wand. of an Artist, app., 1859 (or Ballabola; a census of N. W. tribes classified by language).

[1] U. S. Ind. Aff., 1889.

>Ha-ilt'-zŭkh, Dall, after Gibbs, in Cont. N. A. Eth., I, 144, 1877 (vocabularies of Bel-bella of Milbank Sound and of Kwákiûtl').

<Nass, Gallatin in Trans. Am. Eth. Soc., II, pt 1, c, 1848.

<Naass, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 77, 1848 (includes Hailstla, Haceltzuk, Billechola, Chimeysan). Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (includes Huitsla).

×Nass, Bancroft, Nat. Races, III, 564, 606, 1882 (includes Hailtza of present family).

>Aht, Sproat, Savage Life, app., 312, 1868 (name suggested for family instead of Nootka-Columbian).

>Aht, Tolmie and Dawson, Comp. Vocabs., 50, 1884 (vocab. of Kaiookwāht).

×Puget Sound Group, Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 474, 1878.

×Hydahs, Keane, App. Stanford's Comp. (Cent. and So. Am.), 473, 1878 (includes Hailtzas of the present family).

>Kwakiool, Tolmie and Dawson, Comp. Vocabs., 27–48, 1884 (vocabs. of Haishilla, Hailtzuk, Kwiha, Likwiltoh, Septs; also map showing family domain).

>Kwā'kiūtl. Boas in Petermann's Mitteilungen, 130, 1887 (general account of family with list of tribes).

Derivation: Waukash, waukash, is the Nootka word "good" "good." When heard by Cook at Friendly Cove, Nootka Sound, it was supposed to be the name of the tribe.

Until recently the languages spoken by the Aht of the west coast of Vancouver Island and the Makah of Cape Flattery, congeneric tribes, and the Haeltzuk and Kwakiutl peoples of the east coast of Vancouver Island and the opposite mainland of British Columbia, have been regarded as representing two distinct families. Recently Dr. Boas has made an extended study of these languages, has collected excellent vocabularies of the supposed families, and as a result of his study it is now possible to unite them on the basis of radical affinity. The main body of the vocabularies of the two languages is remarkably distinct, though a considerable number of important words are shown to be common to the two.

Dr. Boas, however, points out that in both languages suffixes only are used in forming words, and a long list of these shows remarkable similarity.

The above family name was based upon a vocabulary of the Wakash Indians, who, according to Gallatin, "inhabit the island on which Nootka Sound is situated." The short vocabulary given was collected by Jewitt. Gallatin states[1] that this language is the one "in that quarter, which, by various vocabularies, is best known to us." In 1848[2] Gallatin repeats his Wakash family, and again gives the vocabulary of Jewitt. There would thus seem to be no doubt of his intention to give it formal rank as a family.

The term "Wakash" for this group of languages has since been generally ignored, and in its place Nootka or Nootka-Columbian has been adopted. "Nootka-Columbian" was employed by Scouler in 1841 for a group of languages, extending from the mouth of Salmon

[1] Archæologia Americana, II, p. 15. [2] Trans. Am. Eth. Soc. II, p. 77.

River to the south of the Columbia River, now known to belong to several distinct families. "Nootka family" was also employed by Hale[1] in 1846, who proposed the name for the tribes of Vancouver Island and those along the south side of the Straits of Fuca.

The term "Nootka-Columbian" is strongly condemned by Sproat.[2] For the group of related tribes on the west side of Vancouver Island this author suggests Aht, "house, tribe, people," as a much more appropriate family appellation.

Though by no means as appropriate a designation as could be found, it seems clear that for the so-called Wakash, Newittee, and other allied languages usually assembled under the Nootka family, the term Wakash of 1836 has priority and must be retained.

GEOGRAPHIC DISTRIBUTION.

The tribes of the Aht division of this family are confined chiefly to the west coast of Vancouver Island. They range to the north as far as Cape Cook, the northern side of that cape being occupied by Haeltzuk tribes, as was ascertained by Dr. Boas in 1886. On the south they reached to a little above Sooke Inlet, that inlet being in possession of the Soke, a Salishan tribe.

The neighborhood of Cape Flattery, Washington, is occupied by the Makah, one of the Wakashan tribes, who probably wrested this outpost of the family from the Salish (Clallam) who next adjoin them on Puget Sound.

The boundaries of the Haeltzuk division of this family are laid down nearly as they appear on Tolmie and Dawson's linguistic map of 1884. The west side of King Island and Cascade Inlet are said by Dr. Boas to be inhabited by Haeltzuk tribes, and are colored accordingly.

PRINCIPAL AHT TRIBES.

Ahowsaht.	Kyoquaht.	Ohiaht.
Ayhuttisaht.	Macaw.	Opechisaht.
Chicklesaht.	Manosaht.	Pachenaht.
Clahoquaht.	Mowachat.	Seshaht.
Hishquayquaht.	Muclaht.	Toquaht.
Howchuklisaht.	Nitinaht.	Yuclulaht.
Kitsmaht.	Nuchalaht.	

Population.—There are 457 Makah at the Neah Bay Agency, Washington.[3] The total population of the tribes of this family under the West Coast Agency, British Columbia, is 3,160.[4] The grand total for this division of the family is thus 3,617.

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[1] U. S. Expl. Expd., vol. 6, p. 220.
[2] Savage Life, 312.
[3] U. S. Census Bulletin for 1890.
[4] Canada Ind. Aff. Rep. for 1888.

PRINCIPAL HAELTZUK TRIBES.

Aquamish.	Keimanoeitoh.	Nakwahtoh.
Belbellah.	Kwakiutl.	Nawiti.
Clowetsus.	Kwashilla.	Nimkish.
Hailtzuk.	Likwiltoh.	Quatsino.
Haishilla.	Mamaleilakitish.	Tsawadinoh.
Kakamatsis.	Matelpa.	

Population.—There are 1,898 of the Haeltzuk division of the family under the Kwawkewlth Agency, British Columbia. Of the Bellacoola (Salishan family) and Haeltzuk, of the present family, there are 2,500 who are not under agents. No separate census of the latter exists at present.

WASHOAN FAMILY.

= Washo, Gatschet in Mag. Am. Hist., 255, April, 1882.
< Shoshone, Keane, App. Stanford's Comp. (Cent. and So. Am.), 477, 1878 (contains Washoes).
< Snake, Keane, ibid. (Same as Shoshone, above.)

This family is represented by a single well known tribe, whose range extended from Reno, on the line of the Central Pacific Railroad, to the lower end of the Carson Valley.

On the basis of vocabularies obtained by Stephen Powers and other investigators, Mr. Gatschet was the first to formally separate the language. The neighborhood of Carson is now the chief seat of the tribe, and here and in the neighboring valleys there are about 200 living a parasitic life about the ranches and towns.

WEITSPEKAN FAMILY.

= Weits-pek, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (a band and language on Klamath at junction of Trinity). Latham, El. Comp. Phil., 410, 1862 (junction of Klamatl and Trinity Rivers). Gatschet in Mag. Am. Hist., 163, 1877 (affirmed to be distinct from any neighboring tongue). Gatschet in Beach, Ind. Misc., 438, 1877.
< Weitspek, Latham in Trans. Philolog. Soc. Lond., 77, 1856 (junction of Klamatl and Trinity Rivers; Weyot and Wishosk dialects). Latham, Opuscula, 343, 1860.
= Eurocs, Powers in Overland Monthly, VIII, 530, June, 1872 (of the Lower Klamath and coastwise; Weitspek, a village of).
= Eurok, Gatschet in Mag. Am. Hist., 163, 1877. Gatschet in Beach, Ind. Misc., 437, 1877.
= Yu'-rok, Powers in Cont. N. A. Eth., III, 45, 1877 (from junction of Trinity to mouth and coastwise). Powell, ibid., 460 (vocabs. of Al-i-kwa, Klamath, Yu'-rok.)
× Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 475, 1878 (Eurocs belong here).

Derivation: Weitspek is the name of a tribe or village of the family situated on Klamath River. The etymology is unknown.

Gibbs was the first to employ this name, which he did in 1853, as

above cited. He states that it is "the name of the principal band on the Klamath, at the junction of the Trinity," adding that "this language prevails from a few miles above that point to the coast, but does not extend far from the river on either side." It would thus seem clear that in this case, as in several others, he selected the name of a band to apply to the language spoken by it. The language thus defined has been accepted as distinct by later authorities except Latham, who included as dialects under the Weitspek language, the locality of which he gives as the junction of the Klamath and Trinity Rivers, the Weyot and Wishosk, both of which are now classed under the Wishoskan family.

By the Karok these tribes are called Yurok, "down" or "below," by which name the family has recently been known.

GEOGRAPHIC DISTRIBUTION.

For our knowledge of the range of the tribes of this family we are chiefly indebted to Stephen Powers.[1] The tribes occupy the lower Klamath River, Oregon, from the mouth of the Trinity down. Upon the coast, Weitspekan territory extends from Gold Bluff to about 6 miles above the mouth of the Klamath. The Chillúla are an offshoot of the Weitspek, living to the south of them, along Redwood Creek to a point about 20 miles inland, and from Gold Bluff to a point about midway between Little and Mad Rivers.

PRINCIPAL TRIBES.

Chillúla, Redwood Creek.
Mita, Klamath River.
Pekwan, Klamath River.
Rikwa, Regua, fishing village at outlet of Klamath River.
Sugon, Shragoin, Klamath River.
Weitspek, Klamath River (above Big Bend).

WISHOSKAN FAMILY.

> Wish-osk, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (given as the name of a dialect on Mad River and Humboldt Bay).

= Wish-osk, Powell in Cont. N. A. Eth., III, 478, 1877 (vocabularies of Wish-osk, Wi-yot, and Ko-wilth). Gatschet in Mag. Am. Hist., 162, 1877 (indicates area occupied by family). Gatschet in Beach, Ind. Misc., 437, 1877.

> Wee-yot, Gibbs in Schoolcraft, Ind. Tribes, III, 422, 1853 (given as the name of a dialect on Eel River and Humboldt Bay).

× Weitspek, Latham in Trans. Philolog. Soc. Lond., 77, 1856 (includes Weyot and Wishosk). Latham, Opuscula, 343, 1860.

< Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 475, 1878 (cited as including Patawats, Weeyots, Wishosks).

Derivation: Wish-osk is the name given to the Bay and Mad River Indians by those of Eel River.

[1] Cont. N. A., Eth., 1877, vol. 3, p. 44.

This is a small and obscure linguistic family and little is known concerning the dialects composing it or of the tribes which speak it.

Gibbs[1] mentions Wee-yot and Wish-osk as dialects of a general language extending "from Cape Mendocino to Mad River and as far back into the interior as the foot of the first range of mountains," but does not distinguish the language by a family name.

Latham considered Weyot and Wishosk to be mere dialects of the same language, i. e., the Weitspek, from which, however, they appeared to him to differ much more than they do from each other. Both Powell and Gatschet have treated the language represented by these dialects as quite distinct from any other, and both have employed the same name.

GEOGRAPHIC DISTRIBUTION.

The area occupied by the tribes speaking dialects of this language was the coast from a little below the mouth of Eel River to a little north of Mad River, including particularly the country about Humboldt Bay. They also extended up the above-named rivers into the mountain passes.

TRIBES.

Patawat, Lower Mad River and Humboldt Bay as far south as Arcata.

Weeyot, mouth of Eel River.

Wishosk, near mouth of Mad River and north part of Humboldt Bay.

YAKONAN FAMILY.

> Yakones, Hale in U. S. Expl. Exp., VI, 198, 218, 1846 (or Iakon, coast of Oregon). Buschmann, Spuren der aztek. Sprache, 612, 1859.

> Iakon, Hale in U. S. Expl. Exp., VI, 218, 569, 1846 (or Lower Killamuks). Buschmann, Spuren der aztek. Sprache, 612, 1859.

> Jacon, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, c, 77, 1848.

> Jakon, Gallatin in Trans. Am. Eth. Soc., II, pt. 1, 17, 1848. Berghaus (1851), Physik. Atlas, map 17, 1852. Gallatin in Schoolcraft, Ind. Tribes, III, 402, 1853 (language of Lower Killamuks). Latham in Trans. Philolog. Soc. Lond., 73, 1856. Latham, Opuscula, 340, 1860.

> Yakon, Latham, Nat. Hist. Man, 324, 1850. Gatschet, in Mag. Am. Hist., 166, 1877. Gatschet in Beach, Ind. Misc., 441, 1877. Bancroft, Nat. Races, III, 565, 640, 1882.

> Yákona, Gatschet in Mag. Am. Hist., 256, 1882.

> Southern Killamuks, Hale in U. S. Expl. Exp., VI, 218, 569, 1846 (or Yakones). Gallatin in Trans. Am. Eth. Soc., II, 17, 1848 (after Hale).

> Sûd Killamuk, Berghaus (1851), Physik. Atlas, map 17, 1852.

> Sainstakla, Latham, Nat. Hist. Man, 325, 1850 ("south of the Yakon, between the Umkwa and the sea").

> Sayúskla, Gatschet in Mag. Am. Hist., 257, 1882 (on Lower Umpqua, Sayúskla, and Smith Rivers).

> Killiwashat, Latham, Nat. Hist. Man, 325, 1850 ("mouth of the Umkwa").

× Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 475, 1878 (cited as including Yacons).

[1] Schoolcraft, Ind. Tribes, 1853, vol. 3, p. 422.

Derivation: From yakwina, signifying "spirit" (Everette).

The Yakwina was the leading tribe of this family. It must have been of importance in early days, as it occupied fifty-six villages along Yaquina River, from the site of Elk City down to the ocean. Only a few survive, and they are with the Alsea on the Siletz Reservation, Tillamook County, Oregon. They were classed by mistake with the Tillamook or "Killamucks" by Lewis and Clarke. They are called by Lewis and Clarke[1] Youikcones and Youkone.[2]

The Alsea formerly dwelt in villages along both sides of Alsea River, Oregon, and on the adjacent coast. They are now on the Siletz Reservation, Oregon. Perhaps a few are on the Grande Ronde Reservation, Oregon.

The Siuslaw used to inhabit villages on the Siuslaw River, Oregon. There may be a few pure Siuslaw on the Siletz Reservation, but Mr. Dorsey did not see any of them. They are mentioned by Drew,[3] who includes them among the "Kat-la-wot-sett" bands. At that time, they were still on the Siuslaw River. The Ku-itc or Lower Umpqua villages were on both sides of the lower part of Umpqua River, Oregon, from its mouth upward for about 30 miles. Above them were the Upper Umpqua villages, of the Athapascan stock. A few members of the Kŭ-itc still reside on the Siletz Reservation, Oregon.

This is a family based by Hale upon a single tribe, numbering six or seven hundred, who live on the coast, north of the Nsietshawus, from whom they differ merely in language. Hale calls the tribe Iakon or Yakones or Southern Killamuks.

The Sayúsklan language has usually been assumed to be distinct from all others, and the comments of Latham and others all tend in this direction. Mr. Gatschet, as above quoted, finally classed it as a distinct stock, at the same time finding certain strong coincidences with the Yakonan family. Recently Mr. Dorsey has collected extensive vocabularies of the Yakonan, Sayúskla, and Lower Umpqua languages and finds unquestioned evidence of relationship.

GEOGRAPHIC DISTRIBUTION.

The family consists of four primary divisions or tribes: Yakwina, Alsea, Siuslaw, and Ku-itc or Lower Umpqua. Each one of these comprised many villages, which were stretched along the western part of Oregon on the rivers flowing into the Pacific, from the Yaquina on the north down to and including the Umpqua River.

TRIBES.

Alsea (on Alseya River). Yakwĭ'na. Kuitc. Siuslaw.

[1] Allen, ed. 1814, vol. 2, p. 473.
[2] U. S. Ind. Aff. Rept., 1857, p. 359.
[3] Ibid., p. 118.

Population.—The U. S. Census Bulletin for 1890 mentions thirty-one tribes as resident on the Siletz Reservation with a combined population of 571. How many Yakwina are among this number is not known. The breaking down of tribal distinctions by reason of the extensive intermarriage of the several tribes is given as the reason for the failure to give a census by tribes.

YANAN FAMILY.

=Nó-zi, Powers in Cont. N. A. Eth., III, 275, 1877 (or No-si; mention of tribe; gives numerals and states they are different from any he has found in California).

=Noces, Gatschet in Mag. Am. Hist., 160, March, 1877 (or Nozes; merely mentioned under Meidoo family).

Derivation: Yana means "people" in the Yanan language.

In 1880 Powell collected a short vocabulary from this tribe, which is chiefly known to the settlers by the name Noje or Nozi. Judged by this vocabulary the language seemed to be distinct from any other. More recently, in 1884, Mr. Curtin visited the remnants of the tribe, consisting of thirty-five individuals, and obtained an extensive collection of words, the study of which seems to confirm the impression of the isolated position of the language as regards other American tongues.

The Nozi seem to have been a small tribe ever since known to Europeans. They have a tradition to the effect that they came to California from the far East. Powers states that they differ markedly in physical traits from all California tribes met by him. At present the Nozi are reduced to two little groups, one at Redding, the other in their original country at Round Mountain, California.

GEOGRAPHIC DISTRIBUTION.

The eastern boundary of the Yanan territory is formed by a range of mountains a little west of Lassen Butte and terminating near Pit River; the northern boundary by a line running from northeast to southwest, passing near the northern side of Round Mountain, 3 miles from Pit River. The western boundary from Redding southward is on an average 10 miles to the east of the Sacramento. North of Redding it averages double that distance or about 20 miles.

YUKIAN FAMILY.

=Yuki, Powers in Cont. N. A. Eth., III, 125–138, 1877 (general description of tribe).

=Yú-ki, Powell in ibid., 483 (vocabs. of Yu'-ki, Hūchnōm, and a fourth unnamed vocabulary).

=Yuka, Powers in Overland Monthly, IX, 305, Oct., 1872 (same as above). Gatschet in Mag. Am. Hist., 161, 1877 (defines habitat of family; gives Yuka, Ashochemies or Wappos, Shumeias, Tahtoos). Gatschet in Beach, Ind. Misc., 435, 1877. Bancroft, Nat. Races, III, 566, 1882 (includes Yuka, Tahtoo, Wapo or Ashochemie).

=Uka, Gatschet in Mag. Am. Hist., 161, 1877. Gatschet in Beach, Ind. Misc., 485, 1877 (same as his Yuka).

×Klamath, Keane, App. Stanford's Comp. (Cent. and So. Am.), 475, 1878 (Yukas of his Klamath belong here).

Derivation: From the Wintun word yuki, meaning "stranger;" secondarily, "bad" or "thieving."

A vocabulary of the Yuki tribe is given by Gibbs in vol. III of Schoolcraft's Indian Tribes, 1853, but no indication is afforded that the language is of a distinct stock.

Powell, as above cited, appears to have been the first to separate the language.

GEOGRAPHIC DISTRIBUTION.

Round Valley, California, subsequently made a reservation to receive the Yuki and other tribes, was formerly the chief seat of the tribes of the family, but they also extended across the mountains to the coast.

PRINCIPAL TRIBES.

Ashochimi (near Healdsburgh).
Chumaya (Middle Eel River).
Napa (upper Napa Valley).
Tatu (Potter Valley).
Yuki (Round Valley, California).

YUMAN FAMILY.

>Yuma, Turner in Pac. R. R. Rep., III, pt. 3, 55, 94, 101, 1856 (includes Cuchan, Coco-Maricopa, Mojave, Diegeño). Latham in Trans. Philolog. Soc. Lond., 86, 1856. Latham, Opuscula, 351, 1860 (as above). Latham in addenda to Opuscula, 392, 1860 (adds Cuchan to the group). Latham, El. Comp. Phil., 420, 1862 (includes Cuchan, Cocomaricopa, Mojave, Dieguno). Gatschet in Mag. Am. Hist., 156, 1877 (mentions only U. S. members of family). Keane, App. Stanford's Comp. (Cent. and So. Am.), 460, 479, 1878 (includes Yumas, Maricopas, Cuchans, Mojaves, Yampais, Yavipais, Hualpais). Bancroft, Nat. Races, III, 569, 1882.

=Yuma, Gatschet in Beach, Ind. Misc., 429, 1877 (habitat and dialects of family). Gatschet in U. S. Geog. Surv. W. 100th M., VII, 413, 414, 1879.

>Dieguno, Latham (1853) in Proc. Philolog. Soc. Lond., VI, 75, 1854 (includes mission of San Diego, Dieguno, Cocomaricopas, Cuchañ, Yumas, Amaquaquas.)

>Cochimi, Latham in Trans. Philolog. Soc. Lond., 87, 1856 (northern part peninsula California). Buschmann, Spuren der aztek. Sprache, 471, 1859 (center of California peninsula). Latham, Opuscula, 353, 1860. Latham, El. Comp. Phil., 423, 1862. Orozco y Berra, Geografía de las Lenguas de México, map, 1864. Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (head of Gulf to near Loreto).

>Layamon, Latham in Trans. Philolog. Soc. Lond., 88, 1856 (a dialect of Waikur ?). Latham, Opuscula, 353, 1860. Latham, El. Comp. Phil., 423, 1862.

>Waikur, Latham in Trans. Philolog. Soc. Lond., 90, 1856 (several dialects of). Latham, Opuscula, 353, 1860. Latham, El. Comp. Phil., 423, 1862.

>Guaycura, Orozco y Berra, Geografía de las Lenguas de México, map, 1864.

>Guaicuri, Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (between 26th and 23d parallels).

>Ushiti, Latham in Trans. Philolog. Soc. Lond., 88, 1856 (perhaps a dialect of Waikur). Latham, Opuscula, 353, 1860.
>Utshiti, Latham, El. Comp. Phil., 423, 1862 (same as Ushiti).
>Pericú, Latham in Trans. Philolog. Soc. Lond., 88, 1856. Latham, Opuscula, 353, 1860. Orozco y Berra, Geografía de las Lenguas de México, map, 1864.
>Pericui, Keane, App. Stanford's Comp. (Cent. and So. Am.), 476, 1878 (from 23° N. L. to Cape S. Lucas and islands).
>Seri, Gatschet in Zeitschr. für Ethnologie, XV, 129, 1883, and XVIII, 115, 1886.

Derivation: A Cuchan word signifying "sons of the river" (Whipple).

In 1856 Turner adopted Yuma as a family name, and placed under it Cuchan, Coco-Maricopa, Mojave and Diegeno.

Three years previously (1853) Latham[1] speaks of the Dieguno language, and discusses with it several others, viz, San Diego, Cocomaricopa, Cuchañ, Yuma, Amaquaqua (Mohave), etc. Though he seems to consider these languages as allied, he gives no indication that he believes them to collectively represent a family, and he made no formal family division. The context is not, however, sufficiently clear to render his position with respect to their exact status as precise as is to be desired, but it is tolerably certain that he did not mean to make Diegueño a family name, for in the volume of the same society for 1856 he includes both the Diegueño and the other above mentioned tribes in the Yuma family, which is here fully set forth. As he makes no allusion to having previously established a family name for the same group of languages, it seems pretty certain that he did not do so, and that the term Diegueño as a family name may be eliminated from consideration. It thus appears that the family name Yuma was proposed by both the above authors during the same year. For, though part 3 of vol. III of Pacific Railroad Reports, in which Turner's article is published, is dated 1855, it appears from a foot-note (p. 84) that his paper was not handed to Mr. Whipple till January, 1856, the date of title page of volume, and that his proof was going through the press during the month of May, which is the month (May 9) that Latham's paper was read before the Philological Society. The fact that Latham's article was not read until May 9 enables us to establish priority of publication in favor of Turner with a reasonable degree of certainty, as doubtless a considerable period elapsed between the presentation of Latham's paper to the society and its final publication, upon which latter must rest its claim. The Yuma of Turner is therefore adopted as of precise date and of undoubted application. Pimentel makes Yuma a part of Piman stock.

GEOGRAPHIC DISTRIBUTION.

The center of distribution of the tribes of this family is generally considered to be the lower Colorado and Gila Valleys. At least this

[1] Proc. London Philol. Soc., vol. 6, 75, 1854.

is the region where they attained their highest physical and mental development. With the exception of certain small areas possessed by Shoshonean tribes, Indians of Yuman stock occupied the Colorado River from its mouth as far up as Cataract Creek where dwell the Havasupai. Upon the Gila and its tributaries they extended as far east as the Tonto Basin. From this center they extended west to the Pacific and on the south throughout the peninsula of Lower California. The mission of San Luis Rey in California was, when established, in Yuman territory, and marks the northern limit of the family. More recently and at the present time this locality is in possession of Shoshonean tribes.

The island of Angel de la Guardia and Tiburon Island were occupied by tribes of the Yuman family, as also was a small section of Mexico lying on the gulf to the north of Guaymas.

PRINCIPAL TRIBES.

Cochimi.	Maricopa.
Cocopa.	Mohave.
Cuchan or Yuma proper.	Seri.
Diegueño.	Waicuru.
Havasupai.	Walapai.

Population.—The present population of these tribes, as given in Indian Affairs Report for 1889, and the U. S. Census Bulletin for 1890, is as follows:

Of the Yuma proper there are 997 in California attached to the Mission Agency and 291 at the San Carlos Agency in Arizona.

Mohave, 640 at the Colorado River Agency in Arizona; 791 under the San Carlos Agency; 400 in Arizona not under an agency.

Havasupai, 214 in Cosnino Cañon, Arizona.

Walapai, 728 in Arizona, chiefly along the Colorado.

Diegueño, 555 under the Mission Agency, California.

Maricopa, 315 at the Pima Agency, Arizona.

The population of the Yuman tribes in Mexico and Lower California is unknown.

ZUÑIAN FAMILY.

=Zuñi, Turner in Pac. R. R. Rep., III, pt. 3, 55, 91–93, 1856 (finds no radical affinity between Zuñi and Keres). Buschmann, Neu-Mexico, 254, 266, 276–278, 280–296, 302, 1858 (vocabs. and general references). Keane, App. Stanford's Com. (Cent. and So. Am.), 479, 1878 ("a stock language"). Powell in Rocky Mountain Presbyterian, Nov., 1878 (includes Zuñi, Las Nutrias, Ojo de Pescado). Gatschet in Mag. Am. Hist., 260, 1882.

=Zuñian, Powell in Am. Nat., 604, August, 1880.

Derivation: From the Cochití term Suinyi, said to mean "the people of the long nails," referring to the surgeons of Zuñi who always wear some of their nails very long (Cushing).

Turner was able to compare the Zuñi language with the Keran, and his conclusion that they were entirely distinct has been fully

substantiated. Turner had vocabularies collected by Lieut. Simpson and by Capt. Eaton, and also one collected by Lieut. Whipple.

The small amount of linguistic material accessible to the earlier writers accounts for the little done in the way of classifying the Pueblo languages. Latham possessed vocabularies of the Moqui, Zuñi, A'coma or Laguna, Jemez, Tesuque, and Taos or Picuri. The affinity of the Tusayan (Moqui) tongue with the Comanche and other Shoshonean languages early attracted attention, and Latham pointed it out with some particularity. With the other Pueblo languages he does little, and attempts no classification into stocks.

GEOGRAPHIC DISTRIBUTION.

The Zuñi occupy but a single permanent pueblo, on the Zuñi River, western New Mexico. Recently, however, the summer villages of Tâiakwin, Heshotatsína, and K'iapkwainakwin have been occupied by a few families during the entire year.

Population.—The present population is 1,613.

CONCLUDING REMARKS.

The task involved in the foregoing classification has been accomplished by intermittent labors extending through more than twenty years of time. Many thousand printed vocabularies, embracing numerous larger lexic and grammatic works, have been studied and compared. In addition to the printed material, a very large body of manuscript matter has been used, which is now in the archives of the Bureau of Ethnology, and which, it is hoped, will ultimately be published. The author does not desire that his work shall be considered final, but rather as initiatory and tentative. The task of studying many hundreds of languages and deriving therefrom ultimate conclusions as contributions to the science of philology is one of great magnitude, and in its accomplishment an army of scholars must be employed. The wealth of this promised harvest appeals strongly to the scholars of America for systematic and patient labor. The languages are many and greatly diverse in their characteristics, in grammatic as well as in lexic elements. The author believes it is safe to affirm that the philosophy of language is some time to be greatly enriched from this source. From the materials which have been and may be gathered in this field the evolution of language can be studied from an early form, wherein words are usually not parts of speech, to a form where the parts of speech are somewhat differentiated; and where the growth of gender, number, and case systems, together with the development of tense and mode systems can be observed. The evolution of mind in the endeavor to express thought, by coining, combining, and contracting words and by organizing logical sentences through the development of parts of speech and

their syntactic arrangement, is abundantly illustrated. The languages are very unequally developed in their several parts. Low gender systems appear with high tense systems, highly evolved case systems with slightly developed mode systems; and there is scarcely any one of these languages, so far as they have been studied, which does not exhibit archaic devices in its grammar.

The author has delayed the present publication somewhat, expecting to supplement it with another paper on the characteristics of those languages which have been most fully recorded, but such supplementary paper has already grown too large for this place and is yet unfinished, while the necessity for speedy publication of the present results seems to be imperative. The needs of the Bureau of Ethnology, in directing the work of the linguists employed in it, and especially in securing and organizing the labor of a large body of collaborators throughout the country, call for this publication at the present time.

In arranging the scheme of linguistic families the author has proceeded very conservatively. Again and again languages have been thrown together as constituting one family and afterwards have been separated, while other languages at first deemed unrelated have ultimately been combined in one stock. Notwithstanding all this care, there remain a number of doubtful cases. For example, Buschmann has thrown the Shoshonean and Nahuatlan families into one. Now the Shoshonean languages are those best known to the author, and with some of them he has a tolerable speaking acquaintance. The evidence brought forward by Buschmann and others seems to be doubtful. A part is derived from jargon words, another part from adventitious similarities, while some facts seem to give warrant to the conclusion that they should be considered as one stock, but the author prefers, under the present state of knowledge, to hold them apart and await further evidence, being inclined to the opinion that the peoples speaking these languages have borrowed some part of their vocabularies from one another.

After considering the subject with such materials as are on hand, this general conclusion has been reached: That borrowed materials exist in all the languages; and that some of these borrowed materials can be traced to original sources, while the larger part of such acquisitions can not be thus relegated to known families. In fact, it is believed that the existing languages, great in number though they are, give evidence of a more primitive condition, when a far greater number were spoken. When there are two or more languages of the same stock, it appears that this differentiation into diverse tongues is due mainly to the absorption of other material, and that thus the multiplication of dialects and languages of the same group furnishes evidence that at some prior time there existed other languages which are now lost except as they are partially preserved in the divergent elements of the group. The conclusion which has been reached, therefore, does

not accord with the hypothesis upon which the investigation began, namely, that common elements would be discovered in all these languages, for the longer the study has proceeded the more clear it has been made to appear that the grand process of linguistic development among the tribes of North America has been toward unification rather than toward multiplication, that is, that the multiplied languages of the same stock owe their origin very largely to absorbed languages that are lost. The data upon which this conclusion has been reached can not here be set forth, but the hope is entertained that the facts already collected may ultimately be marshaled in such a manner that philologists will be able to weigh the evidence and estimate it for what it may be worth.

The opinion that the differentiation of languages within a single stock is mainly due to the absorption of materials from other stocks, often to the extinguishment of the latter, has grown from year to year as the investigation has proceeded. Wherever the material has been sufficient to warrant a conclusion on this subject, no language has been found to be simple in its origin, but every language has been found to be composed of diverse elements. The processes of borrowing known in historic times are those which have been at work in prehistoric times, and it is not probable that any simple language derived from some single pristine group of roots can be discovered.

There is an opinion current that the lower languages change with great rapidity, and that, by reason of this, dialects and languages of the same stock are speedily differentiated. This widely spread opinion does not find warrant in the facts discovered in the course of this research. The author has everywhere been impressed with the fact that savage tongues are singularly persistent, and that a language which is dependent for its existence upon oral tradition is not easily modified. The same words in the same form are repeated from generation to generation, so that lexic and grammatic elements have a life that changes very slowly. This is especially true where the habitat of the tribe is unchanged. Migration introduces a potent agency of mutation, but a new environment impresses its characteristics upon a language more by a change in the sematic content or meaning of words than by change in their forms. There is another agency of change of profound influence, namely, association with other tongues. When peoples are absorbed by peaceful or militant agencies new materials are brought into their language, and the affiliation of such matter seems to be the chief factor in the differentiation of languages within the same stock. In the presence of opinions that have slowly grown in this direction, the author is inclined to think that some of the groups herein recognized as families will ultimately be divided, as the common materials of such languages, when they are more thoroughly studied, will be seen to have been borrowed.

In the studies which have been made as preliminary to this paper, I have had great assistance from Mr. James C. Pilling and Mr. Henry W. Henshaw. Mr. Pilling began by preparing a list of papers used by me, but his work has developed until it assumes the proportions of a great bibliographic research, and already he has published five bibliographies, amounting in all to about 1,200 pages. He is publishing this bibliographic material by linguistic families, as classified by myself in this paper. Scholars in this field of research will find their labors greatly abridged by the work of Mr. Pilling. Mr. Henshaw began the preparation of the list of tribes, but his work also has developed into an elaborate system of research into the synonymy of the North American tribes, and when his work is published it will constitute a great and valuable contribution to the subject. The present paper is but a preface to the works of Mr. Pilling and Mr. Henshaw, and would have been published in form as such had not their publications assumed such proportions as to preclude it. And finally, it is needful to say that I could not have found the time to make this classification, imperfect as it is, except with the aid of the great labors of the gentlemen mentioned, for they have gathered the literature and brought it ready to my hand. For the classification itself, however, I am wholly responsible.

I am also indebted to Mr. Albert S. Gatschet and Mr. J. Owen Dorsey for the preparation of many comparative lists necessary to my work.

The task of preparing the map accompanying this paper was greatly facilitated by the previously published map of Gallatin. I am especially indebted to Col. Garrick Mallery for work done in the early part of its preparation in this form. I have also received assistance from Messrs. Gatschet, Dorsey, Mooney and Curtin. The final form which it has taken is largely due to the labors of Mr. Henshaw, who has gathered many important facts relating to the habitat of North American tribes while preparing a synonymy of tribal names.

THE MIDĒ'WIWIN OR "GRAND MEDICINE SOCIETY"

OF

THE OJIBWA.

BY

W. J. HOFFMAN.

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THE MIDĒ'WIWIN OR "GRAND MEDICINE SOCIETY" OF THE OJIBWAY.

By W. J. Hoffman.

INTRODUCTION.

The Ojibwa is one of the largest tribes of the United States, and it is scattered over a considerable area, from the Province of Ontario, on the east, to the Red River of the North, on the west, and from Manitoba southward through the States of Minnesota, Wisconsin, and Michigan. This tribe is, strictly speaking, a timber people, and in its westward migration or dispersion has never passed beyond the limit of the timber growth which so remarkably divides the State of Minnesota into two parts possessing distinct physical features. The western portion of this State is a gently undulating prairie which sweeps away to the Rocky Mountains, while the eastern portion is heavily timbered. The dividing line, at or near the meridian of 95° 50′ west longitude, extends due north and south, and at a point about 75 miles south of the northern boundary the timber line trends toward the northwest, crossing the State line, 49° north latitude, at about 97° 10′ west longitude.

Minnesota contains many thousand lakes of various sizes, some of which are connected by fine water courses, while others are entirely isolated. The wooded country is undulating, the elevated portions being covered chiefly with pine, fir, spruce, and other coniferous trees, and the lowest depressions being occupied by lakes, ponds, or marshes, around which occur the tamarack, willow, and other trees which thrive in moist ground, while the regions between these extremes are covered with oak, poplar, ash, birch, maple, and many other varieties of trees and shrubs.

Wild fowl, game, and fish are still abundant, and until recently have furnished to the Indians the chief source of subsistence.

Tribal organization according to the totemic system is practically broken up, as the Indians are generally located upon or near the several reservations set apart for them by the General Government, where they have been under more or less restraint by the United States Indian agents and the missionaries. Representatives of various totems or gentes may therefore be found upon a single reservation,

where they continue to adhere to traditional customs and beliefs, thus presenting an interesting field for ethnologic research.

The present distribution of the Ojibwa in Minnesota and Wisconsin is indicated upon the accompanying map, Pl. II. In the southern portion many of these people have adopted civilized pursuits, but throughout the northern and northwestern part many bands continue to adhere to their primitive methods and are commonly designated "wild Indians." The habitations of many of the latter are rude and primitive. The bands on the northeast shore of Red Lake, as well as a few others farther east, have occupied these isolated sites for an uninterrupted period of about three centuries, as is affirmed by the chief men of the several villages and corroborated by other traditional evidence.

Father Claude Alloüez, upon his arrival in 1666 at Shagawaumikong, or La Pointe, found the Ojibwa preparing to attack the Sioux. The settlement at this point was an extensive one, and in traditions pertaining to the "Grand Medicine Society" frequent allusion is made to the fact that at this place the rites were practiced in their greatest purity.

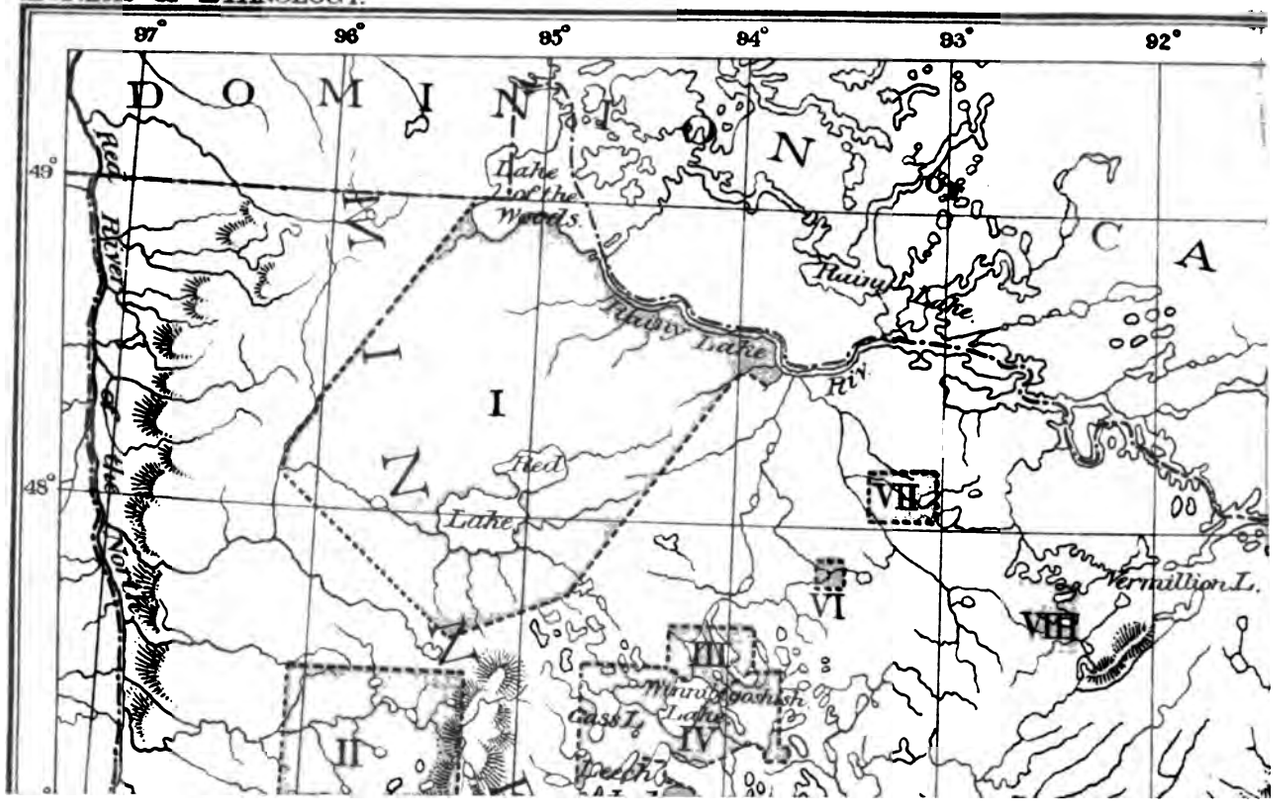
Mr. Warren, in his History of the Ojibwa Indians,[1] bases his belief upon traditional evidence that the Ojibwa first had knowledge of the whites in 1612. Early in the seventeenth century the French missionaries met with various tribes of the Algonkian linguistic stock, as well as with bands or subtribes of the Ojibwa Indians. One of the latter, inhabiting the vicinity of Sault Ste. Marie, is frequently mentioned in the Jesuit Relations as the Saulteurs. This term was applied to all those people who lived at the Falls, but from other statements it is clear that the Ojibwa formed the most important body in that vicinity. La Hontan speaks of the "Outchepoues, alias Sauteurs," as good warriors. The name Saulteur survives at this day and is applied to a division of the tribe.

According to statements made by numerous Ojibwa chiefs of importance the tribe began its westward dispersion from La Pointe and Fond du Lac at least two hundred and fifty years ago, some of the bands penetrating the swampy country of northern Minnesota, while others went westward and southwestward. According to a statement[2] of the location of the tribes of Lake Superior, made at Mackinaw in 1736, the Sioux then occupied the southern and northern extremities of that lake. It is possible, however, that the northern bands of the Ojibwa may have penetrated the region adjacent to the Pigeon River and passed west to near their present location, thus avoiding their enemies who occupied the lake shore south of them.

[1] Coll. Minn. Hist. Soc., 1885, vol. 5, p. 130.

[2] Reproduced from the ninth volume of the New York Colonial Documents, pp. 1054, 1055.

BUREAU OF ETHNOLOGY.



From recent investigations among a number of tribes of the Algonkian linguistic division it is found that the traditions and practices pertaining to the Midē'wiwin, Society of the Midē' or Shamans, popularly designated as the "Grand Medicine Society," prevailed generally, and the rites are still practiced at irregular intervals, though in slightly different forms in various localities.

In the reports of early travelers and missionaries no special mention is made of the Midē', the Jes'sakkīd', or the Wâbĕnō', but the term sorcerer or juggler is generally employed to designate that class of persons who professed the power of prophecy, and who practiced incantation and administered medicinal preparations. Constant reference is made to the opposition of these personages to the introduction of Christianity. In the light of recent investigation the cause of this antagonism is seen to lie in the fact that the traditions of Indian genesis and cosmogony and the ritual of initiation into the Society of the Midē' constitute what is to them a religion, even more powerful and impressive than the Christian religion is to the average civilized man. This opposition still exists among the leading classes of a number of the Algonkian tribes, and especially among the Ojibwa, many bands of whom have been more or less isolated and beyond convenient reach of the Church. The purposes of the society are twofold; first, to preserve the traditions just mentioned, and second, to give a certain class of ambitious men and women sufficient influence through their acknowledged power of exorcism and necromancy to lead a comfortable life at the expense of the credulous. The persons admitted into the society are firmly believed to possess the power of communing with various supernatural beings—manidos—and in order that certain desires may be realized they are sought after and consulted. The purpose of the present paper is to give an account of this society and of the ceremony of initiation as studied and observed at White Earth, Minnesota, in 1889. Before proceeding to this, however, it may be of interest to consider a few statements made by early travelers respecting the "sorcerers or jugglers" and the methods of medication.

In referring to the practices of the Algonkian tribes of the Northwest, La Hontan[1] says:

> When they are sick, they only drink Broth, and eat sparingly; and if they have the good luck to fall asleep, they think themselves cur'd: They have told me frequently, that sleeping and sweating would cure the most stubborn Diseases in the World. When they are so weak that they cannot get out of Bed, their Relations come and dance and make merry before 'em, in order to divert 'em. To conclude, when they are ill, they are always visited by a sort of Quacks, (*Jongleurs*); of whom 't will now be proper to subjoin two or three Words by the bye.
>
> A *Jongleur* is a sort of *Physician*, or rather a *Quack*, who being once cur'd of some dangerous Distemper, has the Presumption and Folly to fancy that he is immortal, and possessed of the Power of curing all Diseases, by speaking to the Good and Evil Spirits. Now though every Body rallies upon these Fellows when

[1] New Voyages to North America, London, 1703, vol. 2, pp. 47, 48.

they are absent, and looks upon 'em as Fools that have lost their Senses by some violent Distemper, yet they allow 'em to visit the Sick; whether it be to divert 'em with their Idle Stories, or to have an Opportunity of seeing them rave, skip about, cry, houl, and make Grimaces and Wry Faces, as if they were possess'd. When all the Bustle is over, they demand a Feast of a Stag and some large Trouts for the Company, who are thus regal'd at once with Diversion and Good Cheer.

When the Quack comes to visit the Patient, he examines him very carefully; *If the Evil Spirit be here*, says he, *we shall quickly dislodge him.* This said, he withdraws by himself to a little Tent made on purpose, where he dances, and sings houling like an Owl; (which gives the Jesuits Occasion to say, *That the Devil converses with 'em.*) After he has made an end of this Quack Jargon, he comes and rubs the Patient in some part of his Body, and pulling some little Bones out of his Mouth, acquaints the Patient, *That these very Bones came out of his Body; that he ought to pluck up a good heart, in regard that his Distemper is but a Trifle; and in fine, that in order to accelerate the Cure, 't will be convenient to send his own and his Relations Slaves to shoot Elks, Deer, &c., to the end they may all eat of that sort of Meat, upon which his Cure does absolutely depend.*

Commonly these Quacks bring 'em some Juices of Plants, which are a sort of Purges, and are called *Maskikik.*

Hennepin, in "A Continuation of the New Discovery," etc.,[1] speaks of the religion and sorcerers of the tribes of the St. Lawrence and those living about the Great Lakes as follows:

We have been all too sadly convinced, that almost all the Salvages in general have no notion of a God, and that they are not able to comprehend the most ordinary Arguments on that Subject; others will have a Spirit that commands, say they, in the Air. Some among 'em look upon the Skie as a kind of Divinity; others as an *Otkon* or *Manitou*, either Good or Evil.

These People admit of some sort of Genius in all things; they all believe there is a Master of Life, as they call him, but hereof they make various applications; some of them have a lean Raven, which they carry always along with them, and which they say is the Master of their Life; others have an Owl, and some again a Bone, a Sea-Shell, or some such thing;

There is no Nation among 'em which has not a sort of Juglers or Conjuerers, which some look upon to be Wizards, but in my Opinion there is no Great reason to believe 'em such, or to think that their Practice favours any thing of a Communication with the Devil.

These Impostors cause themselves to be reverenced as Prophets which fore-tell Futurity. They will needs be look'd upon to have an unlimited Power. They boast of being able to makè it Wet or Dry; to cause a Calm or a Storm; to render Land Fruitful or Barren; and, in a Word to make Hunters Fortunate or Unfortunate. They also pretend to Physick, and to apply Medicines, but which are such, for the most part as have little Virtue at all in 'em, especially to Cure that Distemper which they pretend to.

It is impossible to imagine, the horrible Howlings and strange Contortions that those Jugglers make of their Bodies, when they are disposing themselves to Conjure, or raise their Enchantments.

Marquette, who visited the Miami, Mascontin and Kickapoo Indians in 1673, after referring to the Indian herbalist, mentions also the ceremony of the "calumet dance," as follows:

They have Physicians amongst them, towards whom they are very liberal when they are sick, thinking that the Operation of the Remedies they take, is proportional to the Presents they make unto those who have prescrib'd them.

[1] London, 1689, p. 59, et. seq.

In connection with this, reference is made by Marquette to a certain class of individuals among the Illinois and Dakota, who were compelled to wear women's clothes, and who were debarred many privileges, but were permitted to "assist at all the Superstitions of their *Juglers*, and their solemn Dances in honor of the *Calumet*, in which they may sing, but it is not lawful for them to dance. They are call'd to their Councils, and nothing is determin'd without their Advice; for, because of their extraordinary way of Living, they are look'd upon as *Manitous*, or at least for great and incomparable Genius's."

That the calumet was brought into requisition upon all occasions of interest is learned from the following statement, in which the same writer declares that it is "the most mysterious thing in the World. The Sceptres of our Kings are not so much respected; for the Savages have such a Deference for this Pipe, that one may call it *The God of Peace and War, and the Arbiter of Life and Death.* Their *Calumet of Peace* is different from the *Calumet of War;* They make use of the former to seal their Alliances and Treaties, to travel with safety, and receive Strangers; and the other is to proclaim War."

This reverence for the calumet is shown by the manner in which it is used at dances, in the ceremony of smoking, etc., indicating a religious devoutness approaching that recently observed among various Algonkian tribes in connection with the ceremonies of the Midē'wiwin. When the calumet dance was held, the Illinois appear to have resorted to the houses in the winter and to the groves in the summer. The above-named authority continues in this connection:

> They chuse for that purpose a set Place among Trees, to shelter themselves against the Heat of the Sun, and lay in the middle a large Matt, as a Carpet, to lay upon the God of the Chief of the Company, who gave the Ball; for every one has his peculiar God, whom they call *Manitoa*. It is sometime a Stone, a Bird, a Serpent, or anything else that they dream of in their Sleep; for they think this *Manitoa* will prosper their Wants, as Fishing, Hunting, and other Enterprizes. To the Right of their *Manitoa* they place the *Calumet*, their Great Deity, making round about it a Kind of Trophy with their Arms, viz. their Clubs, Axes, Bows, Quivers, and Arrows. * * * Every Body sits down afterwards, round about, as they come, having first of all saluted the *Manitoa*, which they do in blowing the Smoak of their Tobacco upon it, which is as much as offering to it Frankincense. * * * This *Preludium* being over, he who is to begin the Dance appears in the middle of the Assembly, and having taken the *Calumet*, presents it to the Sun, as if he wou'd invite him to smoke. Then he moves it into an infinite Number of Postures sometimes laying it near the Ground, then stretching its Wings, as if he wou'd make it fly, and then presents it to the Spectators, who smoke with it one after another, dancing all the while. This is the first Scene of this famous Ball.

The infinite number of postures assumed in offering the pipe appear as significant as the "smoke ceremonies" mentioned in connection with the preparatory instruction of the candidate previous to his initiation into the Midē'wiwin.

In his remarks on the religion of the Indians and the practices of the sorcerers, Hennepin says:

As for their Opinion concerning the Earth, they make use of a Name of a certain *Genius*, whom they call *Micaboche*, who has cover'd the whole Earth with water (as they imagine) and relate innumerable fabulous Tales, some of which have a kind of Analogy with the Universal Deluge. These Barbarians believe that there are certain Spirits in the Air, between Heaven and Earth, who have a power to foretell future Events, and others who play the part of Physicians, curing all sorts of Distempers. Upon which account, it happens, that these *Savages* are very Superstitious, and consult their Oracles with a great deal of exactness. One of these Masters-Jugglers who pass for Sorcerers among them, one day caus'd a Hut to be erected with ten thick Stakes, which he fix'd very deep in the Ground, and then made a horrible noise to Consult the Spirits, to know whether abundance of Snow wou'd fall ere long, that they might have good game in the Hunting of Elks and Beavers: Afterward he bawl'd out aloud from the bottom of the Hut, that he saw many Herds of Elks, which were as yet at a very great distance, but that they drew near within seven or eight Leagues of their Huts, which caus'd a great deal of joy among those poor deluded Wretches.

That this statement refers to one or more tribes of the Algonkian linguistic stock is evident, not only because of the reference to the sorcerers and their peculiar methods of procedure, but also that the name of *Micaboche*, an Algonkian divinity, appears. This Spirit, who acted as an intercessor between Ki'tshi Man'idō (Great Spirit) and the Indians, is known among the Ojibwa as Mi'nabō'zho; but to this full reference will be made further on in connection with the Myth of the origin of the Midē'wiwin. The tradition of Nokomis (the earth) and the birth of Manabush (the Mi'nabō'zho of the Menomoni) and his brother, the Wolf, that pertaining to the re-creation of the world, and fragments of other myths, are thrown together and in a mangled form presented by Hennepin in the following words:

Some Salvages which live at the upper end of the River St. *Laurence*, do relate a pretty diverting Story. They hold almost the same opinion with the former [the Iroquois], that a Woman came down from Heaven, and remained for some while fluttering in the Air, not finding Ground whereupon to put her Foot. But that the Fishes moved with Compassion for her, immediately held a Consultation to deliberate which of them should receive her. The Tortoise very officiously offered its Back on the Surface of the Water. The Woman came to rest upon it, and fixed herself there. Afterwards the Filthiness and Dirt of the Sea gathering together about the Tortoise, there was formed by little and little that vast Tract of Land, which we now call *America*.

They add that this Woman grew weary of her Solitude, wanting some body for to keep her Company, that so she might spend her time more pleasantly. Melancholy and Sadness having seiz'd upon her Spirits, she fell asleep, and a Spirit descended from above, and finding her in that Condition approach'd and knew her unperceptibly. From which Approach she conceived two Children, which came forth out of one of her Ribs. But these two Brothers could never afterwards agree together. One of them was a better Huntsman than the other; they quarreled every day; and their Disputes grew so high at last, that one could not bear with the other. One especially being of a very wild Temper, hated mortally his Brother who was of a milder Constitution, who being no longer able to endure the Pranks of the other,

he resolved at last to part from him. He retired then into Heaven, whence, for a Mark of his just Resentment, he causeth at several times his Thunder to rore over the Head of his unfortunate Brother.

Sometime after the Spirit descended again on that Woman, and she conceived a Daughter, from whom (as the Salvages say) were propagated these numerous People, which do occupy now one of the greatest parts of the Universe.

It is evident that the narrator has sufficiently distorted the traditions to make them conform, as much as practicable, to the biblical story of the birth of Christ. No reference whatever is made in the Ojibwa or Menomoni myths to the conception of the Daughter of Nokomis (the earth) by a celestial visitant, but the reference is to one of the wind gods. Mi'nabō'zho became angered with the Ki'tshi Man'idō, and the latter, to appease his discontent, gave to Mi'nabō'zho the rite of the Midē'wiwin. The brother of Mi'nabō'zho was destroyed by the malevolent underground spirits and now rules the abode of shadows,—the "Land of the Midnight Sun."

Upon his arrival at the "Bay of Puans" (Green Bay, Wisconsin), Marquette found a village inhabited by three nations, viz: "Miamis, Maskoutens, and Kikabeux." He says:

When I arriv'd there, I was very glad to see a great Cross set up in the middle of the Village, adorn'd with several White Skins, Red Girdles, Bows and Arrows, which that good People had offer'd to the Great *Manitou*, to return him their Thanks for the care he had taken of them during the Winter, and that he had granted them a prosperous Hunting. *Manitou*, is the Name they give in general to all Spirits whom they think to be above the Nature of Man.

Marquette was without doubt ignorant of the fact that the cross is the sacred post, and the symbol of the fourth degree of the Midē'wiwin, as will be fully explained in connection with that grade of the society. The erroneous conclusion that the cross was erected as an evidence of the adoption of Christianity, and possibly as a compliment to the visitor, was a natural one on the part of the priest, but this same symbol of the Midē' Society had probably been erected and bedecked with barbaric emblems and weapons months before anything was known of him.

The result of personal investigations among the Ojibwa, conducted during the years 1887, 1888 and 1889, are presented in the accompanying paper. The information was obtained from a number of the chief Midē' priests living at Red Lake and White Earth reservations, as well as from members of the society from other reservations, who visited the last named locality during the three years. Special mention of the peculiarity of the music recorded will be made at the proper place; and it may here be said that in no instance was the use of colors detected, in any birch-bark or other records or mnemonic songs, simply to heighten the artistic effect; though the reader would be led by an examination of the works of Schoolcraft to believe this to be a common practice. Col. Garrick Mallery, U. S. Army, in a paper read before the Anthropological Society of

Washington, District of Columbia, in 1888, says, regarding this subject:

> The general character of his voluminous publications has not been such as to assure modern critics of his accuracy, and the wonderful minuteness, as well as comprehension, attributed by him to the Ojibwa hieroglyphs has been generally regarded of late with suspicion. It was considered in the Bureau of Ethnology an important duty to ascertain how much of truth existed in these remarkable accounts, and for that purpose its pictographic specialists, myself and Dr. W. J. Hoffman as assistant, were last summer directed to proceed to the most favorable points in the present habitat of the tribe, namely, the northern region of Minnesota and Wisconsin, to ascertain how much was yet to be discovered. * * * The general results of the comparison of Schoolcraft's statements with what is now found shows that, in substance, he told the truth, but with much exaggeration and coloring. The word "coloring" is particularly appropriate, because, in his copious illustrations, various colors were used freely with apparent significance, whereas, in fact, the general rule in regard to the birch-bark rolls was that they were never colored at all; indeed, the bark was not adapted to coloration. The metaphorical coloring was also used by him in a manner which, to any thorough student of the Indian philosophy and religion, seems absurd. Metaphysical expressions are attached to some of the devices, or, as he calls them, symbols, which could never have been entertained by a people in the stage of culture of the Ojibwa.

SHAMANS.

There are extant among the Ojibwa Indians three classes of mystery men, termed respectively and in order of importance the Midē', the Jĕs'sakkīd', and the Wâbĕnō', but before proceeding to elaborate in detail the Society of the Midē', known as the Midē'wiwin, a brief description of the last two is necessary.

The term Wâbĕnō' has been explained by various intelligent Indians as signifying "Men of the dawn," "Eastern men," etc. Their profession is not thoroughly understood, and their number is so extremely limited that but little information respecting them can be obtained. Schoolcraft,[1] in referring to the several classes of Shamans, says "there is a third form or rather modification of the medawin, * * * the Wâbĕnō'; a term denoting a kind of midnight orgies, which is regarded as a corruption of the Meda." This writer furthermore remarks[2] that "it is stated by judicious persons among themselves to be of modern origin. They regard it as a degraded form of the mysteries of the Meda."

From personal investigation it has been ascertained that a Wâbĕnō' does not affiliate with others of his class so as to constitute a society, but indulges his pretensions individually. A Wâbĕnō' is primarily prompted by dreams or visions which may occur during his youth, for which purpose he leaves his village to fast for an indefinite number of days. It is positively affirmed that evil man'idōs favor his de-

[1] Information respecting the history, condition, and prospects of the Indian tribes of the United States. Philadelphia, 1851, vol. 1, p. 319.

[2] Ibid., p. 362.

sires, and apart from his general routine of furnishing "hunting medicine," "love powders," etc., he pretends also to practice medical magic. When a hunter has been successful through the supposed assistance of the Wâbĕnō′, he supplies the latter with part of the game, when, in giving a feast to his tutelary daimon, the Wâbĕnō′ will invite a number of friends, but all who desire to come are welcome. This feast is given at night; singing and dancing are boisterously indulged in, and the Wâbĕnō′, to sustain his reputation, entertains his visitors with a further exhibition of his skill. By the use of plants he is alleged to be enabled to take up and handle with impunity red-hot stones and burning brands, and without evincing the slightest discomfort it is said that he will bathe his hands in boiling water, or even boiling maple sirup. On account of such performances the general impression prevails among the Indians that the Wâbĕnō′ is a "dealer in fire," or "fire-handler." Such exhibitions always terminate at the approach of day. The number of these pretenders who are not members of the Midē′wiwin, is very limited; for instance, there are at present but two or three at White Earth Reservation and none at Leech Lake.

As a general rule, however, the Wâbĕnō′ will seek entrance into the Midē′wiwin when he becomes more of a specialist in the practice of medical magic, incantations, and the exorcism of malevolent man′idōs, especially such as cause disease.

The Jĕs′sakkīd′ is a seer and prophet; though commonly designated a "juggler," the Indians define him as a "revealer of hidden truths." There is no association whatever between the members of this profession, and each practices his art singly and alone whenever a demand is made and the fee presented. As there is no association, so there is no initiation by means of which one may become a Jĕs′sakkīd′. The gift is believed to be given by the thunder god, or Animiki′, and then only at long intervals and to a chosen few. The gift is received during youth, when the fast is undertaken and when visions appear to the individual. His renown depends upon his own audacity and the opinion of the tribe. He is said to possess the power to look into futurity; to become acquainted with the affairs and intentions of men; to prognosticate the success or misfortune of hunters and warriors, as well as other affairs of various individuals, and to call from any living human being the soul, or, more strictly speaking, the shadow, thus depriving the victim of reason, and even of life. His power consists in invoking and causing evil, while that of the Midē′ is to avert it; he attempts at times to injure the Midē′, but the latter, by the aid of his superior man′idōs, becomes aware of, and averts such premeditated injury. It sometimes happens that the demon possessing a patient is discovered, but the Midē′ alone has the power to expel him. The exorcism of demons is one of the chief pretensions of this personage, and evil spirits are sometimes removed

by sucking them through tubes, and startling tales are told how the Jĕs'sakkīd' can, in the twinkling of an eye, disengage himself of the most complicated tying of cords and ropes, etc. The lodge used by this class of men consists of four poles planted in the ground, forming a square of three or four feet and upward in diameter, around which are wrapped birch bark, robes, or canvas in such a way as to form an upright cylinder. Communion is held with the turtle, who is the most powerful man'idō of the Jĕs'sakkīd', and through him, with numerous other malevolent man'idōs, especially the Animiki', or thunder-bird. When the prophet has seated himself within his lodge the structure begins to sway violently from side to side, loud thumping noises are heard within, denoting the arrival of man'idōs, and numerous voices and laughter are distinctly audible to those without. Questions may then be put to the prophet and, if everything be favorable, the response is not long in coming. In his notice of the Jĕs'sakkīd', Schoolcraft affirms[1] that "while he thus exercises the functions of a prophet, he is also a member of the highest class of the fraternity of the Midâwin—a society of men who exercise the medical art on the principles of magic and incantations. The fact is that there is not the slightest connection between the practice of the Jĕs'sakkīd' and that of the Midē'wiwin, and it is seldom, if at all, that a Midē' becomes a Jĕs'sakkīd', although the latter sometimes gains admission into the Midē'wiwin, chiefly with the intention of strengthening his power with his tribe.

The number of individuals of this class who are not members of the Midē'wiwin is limited, though greater than that of the Wâbĕnō'. An idea of the proportion of numbers of the respective classes may be formed by taking the case of Menomoni Indians, who are in this respect upon the same plane as the Ojibwa. That tribe numbers about fifteen hundred, the Midē' Society consisting, in round numbers, of one hundred members, and among the entire population there are but two Wâbĕnō' and five Jĕs'sakkīd'.

It is evident that neither the Wâbĕnō' nor the Jĕs'sakkīd' confine themselves to the mnemonic songs which are employed during their ceremonial performances, or even prepare them to any extent. Such bark records as have been observed or recorded, even after most careful research and examination extending over the field seasons of three years, prove to have been the property of Wâbĕnō' and Jĕs'sakkīd', who were also Midē'. It is probable that those who practice either of the first two forms of ceremonies and nothing else are familiar with and may employ for their own information certain mnemonic records; but they are limited to the characteristic formulæ of exorcism, as their practice varies and is subject to changes according to circumstances and the requirements and wants of the applicant when words are chanted to accord therewith.

[1] Op. cit., vol. 5, p. 423.

Some examples of songs used by Jĕs'sakkīd', after they have become Midē', will be given in the description of the several degrees of the Midē'wiwin.

There is still another class of persons termed Mashkī'kīkē'winĭnĭ, or herbalists, who are generally denominated "medicine men," as the Ojibwa word implies. Their calling is a simple one, and consists in knowing the mysterious properties of a variety of plants, herbs, roots, and berries, which are revealed upon application and for a fee. When there is an administration of a remedy for a given complaint, based upon true scientific principles, it is only in consequence of such practice having been acquired from the whites, as it has usually been the custom of the Catholic Fathers to utilize all ordinary and available remedies for the treatment of the common

FIG. 1.—Herbalist preparing medicine and treating patient.

disorders of life. Although these herbalists are aware that certain plants or roots will produce a specified effect upon the human system, they attribute the benefit to the fact that such remedies are distasteful and injurious to the demons who are present in the system and to whom the disease is attributed. Many of these herbalists are found among women, also; and these, too, are generally members of the Midē'wiwin. In Fig. 1 is shown an herbalist preparing a mixture.

The origin of the Midē'wiwin or Midē' Society, commonly, though erroneously, termed Grand Medicine Society, is buried in obscurity. In the Jesuit Relations, as early as 1642, frequent reference is made to sorcerers, jugglers, and persons whose faith, influence, and practices are dependent upon the assistance of "Manitous," or mysterious spirits; though, as there is no discrimination made between these different professors of magic, it is difficult positively to determine which of the several classes were met with at that early day. It is probable that the Jĕs'sakkīd', or juggler, and the Midē', or Shaman, were referred to.

The Midē', in the true sense of the word, is a Shaman, though he has by various authors been termed powwow, medicine man, priest, seer, prophet, etc. Among the Ojibwa the office is not hereditary; but among the Menomoni a curious custom exists, by which some one is selected to fill the vacancy one year after the death of a Shaman. Whether a similar practice prevailed among other tribes of the Algonkian linguistic stock can be ascertained only by similar research among the tribes constituting that stock.

Among the Ojibwa, however, a substitute is sometimes taken to fill the place of one who has been prepared to receive the first degree of the Midē'wiwin, or Society of the Midē', but who is removed by death before the proper initiation has been conferred. This occurs when a young man dies, in which case his father or mother may be accepted as a substitute. This will be explained in more detail under the caption of Dzhibai' Midē'wigân or "Ghost Lodge," a collateral branch of the Midē'wiwin.

As I shall have occasion to refer to the work of the late Mr. W. W. Warren, a few words respecting him will not be inappropriate. Mr. Warren was an Ojibwa mixed blood, of good education, and later a member of the legislature of Minnesota. His work, entiled "History of the Ojibwa Nation," was published in Vol. v of the Collections of the Minnesota Historical Society, St. Paul, 1885, and edited by Dr. E. D. Neill. Mr. Warren's work is the result of the labor of a lifetime among his own people, and, had he lived, he would undoubtedly have added much to the historical material of which the printed volume chiefly consists. His manuscript was completed about the year 1852, and he died the following year. In speaking of the Society of the Midē',[1] he says:

> The grand rite of Me-da-we-win (or, as we have learned to term it, "Grand Medicine," and the beliefs incorporated therein, are not yet fully understood by the whites. This important custom is still shrouded in mystery even to my own eyes, though I have taken much pains to inquire and made use of every advantage possessed by speaking their language perfectly, being related to them, possessing their friendship and intimate confidence has given me, and yet I frankly acknowledge that I stand as yet, as it were, on the threshold of the Me-da-we lodge. I believe, however, that I have obtained full as much and more general and true information

[1] Op. cit., pp. 65, 66.

on this matter than any other person who has written on the subject, not excepting a great and standard author, who, to the surprise of many who know the Ojibways well, has boldly asserted in one of his works that he has been regularly initiated into the mysteries of this rite, and is a member of the Me-da-we Society. This is certainly an assertion hard to believe in the Indian country; and when the old initiators or Indian priests are told of it they shake their heads in incredulity that a white man should ever have been allowed *in truth* to become a member of their Me-da-we lodge.

An entrance into the lodge itself, while the ceremonies are being enacted, has sometimes been granted through courtesy; though this does not initiate a person into the mysteries of the creed, nor does it make him a member of the Society.

These remarks pertaining to the pretensions of "a great and standard authority" have reference to Mr. Schoolcraft, who among numerous other assertions makes the following, in the first volume of his Information Respecting the Indian Tribes of the United States, Philadelphia, 1851, p. 361, viz:

I had observed the exhibitions of the Medawin, and the exactness and studious ceremony with which its rites were performed in 1820 in the region of Lake Superior; and determined to avail myself of the advantages of my official position, in 1822, when I returned as a Government agent for the tribes, to make further inquiries into its principles and mode of proceeding. And for this purpose I had its ceremonies repeated in my office, under the secrecy of closed doors, with every means of both correct interpretation and of recording the result. Prior to this transaction I had observed in the hands of an Indian of the Odjibwa tribe one of those symbolic tablets of pictorial notation which have been sometimes called "music boards," from the fact of their devices being sung off by the initiated of the Meda Society. This constituted the object of the explanations, which, in accordance with the positive requisitions of the leader of the society and three other initiates, was thus ceremoniously made.

This statement is followed by another,[1] in which Mr. Schoolcraft, in a foot-note, affirms:

Having in 1823 been myself admitted to the class of a Meda by the Chippewas, and taken the initiatory step of a SAGIMA and JESUKAID in each of the other fraternities, and studied their pictographic system with great care and good helps, I may speak with the more decision on the subject.

Mr. Schoolcraft presents a superficial outline of the initiatory ceremonies as conducted during his time, but as the description is meager, notwithstanding that there is every evidence that the ceremonies were conducted with more completeness and elaborate dramatization nearly three-quarters of a century ago than at the present day, I shall not burden this paper with useless repetition, but present the subject as conducted within the last three years.

Mr. Warren truly says:

In the Me-da-we rite is incorporated most that is ancient amongst them—songs and traditions that have descended not orally, but in hieroglyphs, for at least a long time of generations. In this rite is also perpetuated the purest and most ancient idioms of their language, which differs somewhat from that of the common everyday use.

[1] Op. cit., vol. 5, p, 71.

As the ritual of the Midē'wiwin is based to a considerable extent upon traditions pertaining to the cosmogony and genesis and to the thoughtful consideration by the Good Spirit for the Indian, it is looked upon by them as "their religion," as they themselves designate it.

In referring to the rapid changes occurring among many of the Western tribes of Indians, and the gradual discontinuance of aboriginal ceremonies and customs, Mr. Warren remarks[1] in reference to the Ojibwa:

Even among these a change is so rapidly taking place, caused by a close contact with the white race, that ten years hence it will be too late to save the traditions of their forefathers from total oblivion. And even now it is with great difficulty that genuine information can be obtained of them. Their aged men are fast falling into their graves, and they carry with them the records of the past history of their people; they are the initiators of the grand rite of religious belief which they believe the Great Spirit has granted to his red children to secure them long life on earth and life hereafter; and in the bosoms of these old men are locked up the original secrets of this their most ancient belief. * * *

They fully believe, and it forms part of their religion, that the world has once been covered by a deluge, and that we are now living on what they term the "new earth." This idea is fully accounted for by their vague traditions; and in their Me-da-we-win or religion, hieroglyphs are used to denote this second earth.

Furthermore,

They fully believe that the red man mortally angered the Great Spirit which caused the deluge, and at the commencement of the new earth it was only through the medium and intercession of a powerful being, whom they denominate Manab-o-sho, that they were allowed to exist, and means were given them whereby to subsist and support life; and a code of religion was more lately bestowed on them, whereby they could commune with the offended Great Spirit, and ward off the approach and ravages of death.

It may be appropriate in this connection to present the description given by Rev. Peter Jones of the Midē' priests and priestesses. Mr. Jones was an educated Ojibwa Episcopal clergyman, and a member of the Missasauga—i. e., the Eagle totemic division of that tribe of Indians living in Canada. In his work[2] he states:

Each tribe has its medicine men and women—an order of priesthood consulted and employed in all times of sickness. These powwows are persons who are believed to have performed extraordinary cures, either by the application of roots and herbs or by incantations. When an Indian wishes to be initiated into the order of a powwow, in the first place he pays a large fee to the faculty. He is then taken into the woods, where he is taught the names and virtues of the various useful plants; next he is instructed how to chant the medicine song, and how to pray, which prayer is a vain repetition offered up to the Master of Life, or to some munedoo whom the afflicted imagine they have offended.

The powwows are held in high veneration by their deluded brethren; not so much for their knowledge of medicine as for the magical power which they are supposed to possess. It is for their interest to lead these credulous people to believe that they can at pleasure hold intercourse with the munedoos, who are ever ready to give them whatever information they require.

[1] Op. cit., p. 25. [2] History of the Ojebway Indians, London [1848(?)], pp. 143, 144.

The Ojibwa believe in a multiplicity of spirits, or man'idōs, which inhabit all space and every conspicuous object in nature. These man'idōs, in turn, are subservient to superior ones, either of a charitable and benevolent character or those which are malignant and aggressive. The chief or superior man'idō is termed Ki'tshi Man'idō —Great Spirit—approaching to a great extent the idea of the God of the Christian religion; the second in their estimation is Dzhe Man'idō, a benign being upon whom they look as the guardian spirit of the Midē'wiwin and through whose divine provision the sacred rites of the Midē'wiwin were granted to man. The Ani'miki or Thunder God is, if not the supreme, at least one of the greatest of the malignant man'idōs, and it is from him that the Jēs'sakkīd' are believed to obtain their powers of evil doing. There is one other, to whom special reference will be made, who abides in and rules the "place of shadows," the hereafter; he is known as Dzhibai' Man'idō— Shadow Spirit, or more commonly Ghost Spirit. The name of Ki'tshi Man'idō is never mentioned but with reverence, and thus only in connection with the rite of Midē'wiwin, or a sacred feast, and always after making an offering of tobacco.

The first important event in the life of an Ojibwa youth is his first fast. For this purpose he will leave his home for some secluded spot in the forest where he will continue to fast for an indefinite number of days; when reduced by abstinence from food he enters a hysterical or ecstatic state in which he may have visions and hallucinations. The spirits which the Ojibwa most desire to see in these dreams are those of mammals and birds, though any object, whether animate or inanimate, is considered a good omen. The object which first appears is adopted as the personal mystery, guardian spirit, or tutelary daimon of the entranced, and is never mentioned by him without first making a sacrifice. A small effigy of this man'idō is made, or its outline drawn upon a small piece of birch bark, which is carried suspended by a string around the neck, or if the wearer be a Midē' he carries it in his "medicine bag" or pinji'gosân. The future course of life of the faster is governed by his dream; and it sometimes occurs that because of giving an imaginary importance to the occurrence, such as beholding, during the trance some powerful man'idō or other object held in great reverence by the members of the Midē' Society, the faster first becomes impressed with the idea of becoming a Midē'. Thereupon he makes application to a prominent Midē' priest, and seeks his advice as to the necessary course to be pursued to attain his desire. If the Midē' priest considers with favor the application, he consults with his confrères and action is taken, and the questions of the requisite preliminary instructions, fees, and presents, etc., are formally discussed. If the Midē' priests are in accord with the desires of the applicant an instructor or preceptor is designated, to whom he must present him-

self and make an agreement as to the amount of preparatory information to be acquired and the fees and other presents to be given in return. These fees have nothing whatever to do with the presents which must be presented to the Midē' priests previous to his initiation as a member of the society, the latter being collected during the time that is devoted to preliminary instruction, which period usually extends over several years. Thus ample time is found for hunting, as skins and peltries, of which those not required as presents may be exchanged for blankets, tobacco, kettles, guns, etc., obtainable from the trader. Sometimes a number of years are spent in preparation for the first degree of the Midē'wiwin, and there are many who have impoverished themselves in the payment of fees and the preparation for the feast to which all visiting priests are also invited.

Should an Indian who is not prompted by a dream wish to join the society he expresses to the four chief officiating priests a desire to purchase a mī'gis, which is the sacred symbol of the society and consists of a small white shell, to which reference will be made further on. His application follows the same course as in the preceding instance, and the same course is pursued also when a Jĕs'sakkīd' or a Wâbĕnō' wishes to become a Midē'.

MIDĒ'WIWIN.

The Midē'wiwin—Society of the Midē' or Shamans—consists of an indefinite number of Midē' of both sexes. The society is graded into four separate and distinct degrees, although there is a general impression prevailing even among certain members that any degree beyond the first is practically a mere repetition. The greater power attained by one in making advancement depends upon the fact of his having submitted to "being shot at with the medicine sacks" in the hands of the officiating priests. This may be the case at this late day in certain localities, but from personal experience it has been learned that there is considerable variation in the dramatization of the ritual. One circumstance presents itself forcibly to the careful observer, and that is that the greater number of repetitions of the phrases chanted by the Midē' the greater is felt to be the amount of inspiration and power of the performance. This is true also of some of the lectures in which reiteration and prolongation in time of delivery aids very much in forcibly impressing the candidate and other observers with the importance and sacredness of the ceremony.

It has always been customary for the Midē' priests to preserve birch-bark records, bearing delicate incised lines to represent pictorially the ground plan of the number of degrees to which the owner is entitled. Such records or charts are sacred and are never exposed to the public view, being brought forward for inspection only when

an accepted candidate has paid his fee, and then only after necessary preparation by fasting and offerings of tobacco.

During the year 1887, while at Red Lake, Minnesota, I had the good fortune to discover the existence of an old birch-bark chart, which, according to the assurances of the chief and assistant Midē' priests, had never before been exhibited to a white man, nor even to an Indian unless he had become a regular candidate. This chart measures 7 feet 1½ inches in length and 18 inches in width, and is made of five pieces of birch bark neatly and securely stitched together by means of thin, flat strands of bass wood. At each end are two thin strips of wood, secured transversely by wrapping and stitching with thin strands of bark, so as to prevent splitting and fraying of the ends of the record. Pl. III A, is a reproduction of the design referred to.

It had been in the keeping of Skwēkŏ'mĭk, to whom it was intrusted at the death of his father-in-law, the latter, in turn, having received it in 1825 from Badâ'san, the Grand Shaman and chief of the Winnibē'goshish Ojibwa.

It is affirmed that Badâ'san had received the original from the Grand Midē' priest at La Pointe, Wisconsin, where, it is said, the Midê'wiwin was at that time held annually and the ceremonies conducted in strict accordance with ancient and traditional usage.

The present owner of this record has for many years used it in the preliminary instruction of candidates. Its value in this respect is very great, as it presents to the Indian a pictorial résumé of the traditional history of the origin of the Midē'wiwin, the positions occupied by the various guardian man'idos in the several degrees, and the order of procedure in study and progress of the candidate. On account of the isolation of the Red Lake Indians and their long continued, independent ceremonial observances, changes have gradually occurred so that there is considerable variation, both in the pictorial representation and the initiation, as compared with the records and ceremonials preserved at other reservations. The reason of this has already been given.

A detailed description of the above mentioned record will be presented further on in connection with two interesting variants which were subsequently obtained at White Earth, Minnesota. On account of the widely separated location of many of the different bands of the Ojibwa, and the establishment of independent Midē' societies, portions of the ritual which have been forgotten by one set may be found to survive at some other locality, though at the expense of some other fragments of tradition or ceremonial. No satisfactory account of the tradition of the origin of the Indians has been obtained, but such information as it was possible to procure will be submitted.

In all of their traditions pertaining to the early history of the tribe these people are termed A-nish'-in-â'-bēg—original people—a term surviving also among the Ottawa, Patawatomi, and Menomoni, indicating that the tradition of their westward migration was extant prior to the final separation of these tribes, which is supposed to have occurred at Sault Ste. Marie.

Mi'nabō'zho (Great Rabbit), whose name occurs in connection with most of the sacred rites, was the servant of Dzhe Man'idō, the Good Spirit, and acted in the capacity of intercessor and mediator. It is generally supposed that it was to his good offices that the Indian owes life and the good things necessary to his health and subsistence.

The tradition of Mi'nabō'zho and the origin of the Midē'wiwin, as given in connection with the birch-bark record obtained at Red Lake (Pl. III A), is as follows:

When Mi'nabō'zho, the servant of Dzhe Man'idō, looked down upon the earth he beheld human beings, the Ani'shinâ'bēg, the ancestors of the Ojibwa. They occupied the four quarters of the earth—the northeast, the southeast, the southwest, and the northwest. He saw how helpless they were, and desiring to give them the means of warding off the diseases with which they were constantly afflicted, and to provide them with animals and plants to serve as food and with other comforts, Mi'nabō'zho remained thoughtfully hovering over the center of the earth, endeavoring to devise some means of communicating with them, when he heard something laugh, and perceived a dark object appear upon the surface of the water to the west (No. 2). He could not recognize its form, and while watching it closely it slowly disappeared from view. It next appeared in the north (No. 3), and after a short lapse of time again disappeared. Mi'nabō'zho hoped it would again show itself upon the surface of the water, which it did in the east (No. 4). Then Mi'nabō'zho wished that it might approach him, so as to permit him to communicate with it. When it disappeared from view in the east and made its reappearance in the south (No. 1), Mi'nabō'zho asked it to come to the center of the earth that he might behold it. Again it disappeared from view, and after reappearing in the west Mi'nabō'zho observed it slowly approaching the center of the earth (i. e., the centre of the circle), when he descended and saw it was the Otter, now one of the sacred man'idōs of the Midē'wiwin. Then Mi'nabō'zho instructed the Otter in the mysteries of the Midē'wiwin, and gave him at the same time the sacred rattle to be used at the side of the sick; the sacred Midē' drum to be used during the ceremonial of initiation and at sacred feasts, and tobacco, to be employed in invocations and in making peace.

The place where Mi'nabō'zho descended was an island in the middle of a large body of water, and the Midē' who is feared by all the others is called Mini'sino'shkwe (He-who-lives-on-the-island). Then

Mi'nabō'zho built a Midē'wigân (sacred Midē' lodge), and taking his drum he beat upon it and sang a Midē' song, telling the Otter that Dzhe Man'idō had decided to help the Aníshinâ'bēg, that they might always have life and an abundance of food and other things necessary for their comfort. Mi'nabō'zho then took the Otter into the Midē'wigân and conferred upon him the secrets of the Midē'wiwin, and with his Midē' bag shot the sacred mī'gis into his body that he might have immortality and be able to confer these secrets to his kinsmen, the Aníshinâ'bēg.

The mī'gis is considered the sacred symbol of the Midē'wigân, and may consist of any small white shell, though the one believed to be similar to the one mentioned in the above tradition resembles the cowrie, and the ceremonies of initiation as carried out in the Midē'-wiwin at this day are believed to be similar to those enacted by Mi'nabō'zho and the Otter. It is admitted by all the Midē' priests whom I have consulted that much of the information has been lost through the death of their aged predecessors, and they feel convinced that ultimately all of the sacred character of the work will be forgotten or lost through the adoption of new religions by the young people and the death of the Midē' priests, who, by the way, decline to accept Christian teachings, and are in consequence termed "pagans."

My instructor and interpreter of the Red Lake chart added other information in explanation of the various characters represented thereon, which I present herewith. The large circle at the right side of the chart denotes the earth as beheld by Mi'nabō'zho, while the Otter appeared at the square projections at Nos. 1, 2, 3, and 4; the semicircular appendages between these are the four quarters of the earth, which are inhabited by the Ani'shinâ'bēg, Nos. 5, 6, 7, and 8. Nos. 9 and 10 represent two of the numerous malignant man'idōs, who endeavor to prevent entrance into the sacred structure and mysteries of the Midē'wiwin. The oblong squares, Nos. 11 and 12, represent the outline of the first degree of the society, the inner corresponding lines being the course traversed during initiation. The entrance to the lodge is directed toward the east, the western exit indicating the course toward the next higher degree. The four human forms at Nos. 13, 14, 15, and 16 are the four officiating Midē' priests whose services are always demanded at an initiation. Each is represented as having a rattle. Nos. 17, 18, and 19 indicate the cedar trees, one of each of this species being planted near the outer angles of a Midē' lodge. No. 20 represents the ground. The outline of the bear at No. 21 represents the Makwa' Man'idō, or Bear Spirit, one of the sacred Midē' man'idōs, to which the candidate must pray and make offerings of tobacco, that he may compel the malevolent spirits to draw away from the entrance to the Midē'wigân, which is shown in No. 28. Nos 23 and 24 represent the sacred drum which

the candidate must use when chanting the prayers, and two offerings must be made, as indicated by the number two.

After the candidate has been admitted to one degree, and is prepared to advance to the second, he offers three feasts, and chants three prayers to the Makwa' Man'idō, or Bear Spirit (No. 22), that the entrance (No. 29) to that degree may be opened to him. The feasts and chants are indicated by the three drums shown at Nos. 25, 26, and 27.

Nos. 30, 31, 32, 33, and 34 are five Serpent Spirits, evil man'idōs who oppose a Midē's progress, though after the feasting and prayers directed to the Makwa' Man'idō have by him been deemed sufficient the four smaller Serpent Spirits move to either side of the path between the two degrees, while the larger serpent (No. 32) raises its body in the middle so as to form an arch, beneath which passes the candidate on his way to the second degree.

Nos. 35, 36, 46, and 47 are four malignant Bear Spirits, who guard the entrance and exit to the second degree, the doors of which are at Nos. 37 and 49. The form of this lodge (No. 38) is like the preceding; but while the seven Midē' priests at Nos. 39, 40, 41, 42, 43, 44, and 45 simply indicate that the number of Midē' assisting at this second initiation are of a higher and more sacred class of personages than in the first degree, the number designated having reference to quality and intensity rather than to the actual number of assistants, as specifically shown at the top of the first degree structure.

When the Midē' is of the second degree, he receives from Dzhe Man'idō supernatural powers as shown in No. 48. The lines extending upward from the eyes signify that he can look into futurity; from the ears, that he can hear what is transpiring at a great distance; from the hands, that he can touch for good or for evil friends and enemies at a distance, however remote; while the lines extending from the feet denote his ability to traverse all space in the accomplishment of his desires or duties. The small disk upon the breast of the figure denotes that a Midē' of this degree has several times had the mī'gis—life—"shot into his body," the increased size of the spot signifying amount or quantity of influence obtained thereby.

No. 50 represents a Mi'tsha Midē' or Bad Midē', one who employs his powers for evil purposes. He has the power of assuming the form of any animal, in which guise he may destroy the life of his victim, immediately after which he resumes his human form and appears innocent of any crime. His services are sought by people who wish to encompass the destruction of enemies or rivals, at however remote a locality the intended victim may be at the time. An illustration representing the modus operandi of his performance is reproduced and explained in Fig. 24, page 238.

Persons possessed of this power are sometimes termed witches, special reference to whom is made elsewhere. The illustration, No.

50, represents such an individual in his disguise of a bear, the characters at Nos. 51 and 52 denoting footprints of a bear made by him, impressions of which are sometimes found in the vicinity of lodges occupied by his intended victims. The trees shown upon either side of No. 50 signify a forest, the location usually sought by bad Midē' and witches.

If a second degree Midē' succeeds in his desire to become a member of the third degree, he proceeds in a manner similar to that before described; he gives feasts to the instructing and four officiating Midē', and offers prayers to Dzhe Man'idō for favor and success. No. 53 denotes that the candidate now personates the bear—not one of the malignant man'idōs, but one of the sacred man'idōs who are believed to be present during the ceremonials of initiation of the second degree. He is seated before his sacred drum, and when the proper time arrives the Serpent Man'idō (No. 54)—who has until this opposed his advancement—now arches its body, and beneath it he crawls and advances toward the door (No. 55) of the third degree (No. 56) of the Midē'wiwin, where he encounters two (Nos. 57 and 58) of the four Panther Spirits, the guardians of this degree.

Nos. 61 to 76 indicate midē' spirits who inhabit the structure of this degree, and the number of human forms in excess of those shown in connection with the second degree indicates a correspondingly higher and more sacred character. When an Indian has passed this initiation he becomes very skillful in his profession of a Midē'. The powers which he possessed in the second degree may become augmented. He is represented in No. 77 with arms extended, and with lines crossing his body and arms denoting darkness and obscurity, which signifies his ability to grasp from the invisible world the knowledge and means to accomplish extraordinary deeds. He feels more confident of prompt response and assistance from the sacred man'idōs and his knowledge of them becomes more widely extended.

Nos. 59 and 60 are two of the four Panther Spirits who are the special guardians of the third degree lodge.

To enter the fourth and highest degree of the society requires a greater number of feasts than before, and the candidate, who continues to personate the Bear Spirit, again uses his sacred drum, as he is shown sitting before it in No. 78, and chants more prayers to Dzhe Man'idō for his favor. This degree is guarded by the greatest number and the most powerful of malevolent spirits, who make a last effort to prevent a candidate's entrance at the door (No. 79) of the fourth degree structure (No. 80). The chief opponents to be overcome, through the assistance of Dzhe Man'idō, are two Panther Spirits (Nos. 81 and 82) at the eastern entrance, and two Bear Spirits (Nos. 83 and 84) at the western exit. Other bad spirits are about the structure, who frequently gain possession and are then enabled to make strong and prolonged resistance to the candidate's entrance.

The chiefs of this group of malevolent beings are Bears (Nos. 88 and 96), the Panther (No. 91), the Lynx (No. 97), and many others whose names they have forgotten, their positions being indicated at Nos. 85, 86, 87, 89, 90, 92, 93, 94, and 95, all but the last resembling characters ordinarily employed to designate serpents.

The power with which it is possible to become endowed after passing through the fourth degree is expressed by the outline of a human figure (No. 98), upon which are a number of spots indicating that the body is covered with the mī'gis or sacred shells, symbolical of the Midē'wiwin. These spots designate the places where the Midē' priests, during the initiation, shot into his body the mī'gis and the lines connecting them in order that all the functions of the several corresponding parts or organs of the body may be exercised.

The ideal fourth degree Midē' is presumed to be in a position to accomplish the greatest feats in necromancy and magic. He is not only endowed with the power of reading the thoughts and intentions of others, as is pictorially indicated by the mī'gis spot upon the top of the head, but to call forth the shadow (soul) and retain it within his grasp at pleasure. At this stage of his pretensions, he is encroaching upon the prerogatives of the Jĕs'sakkīd', and is then recognized as one, as he usually performs within the Jĕs'sakkân or Jĕs'sakkīd' lodge, commonly designated "the Jugglery."

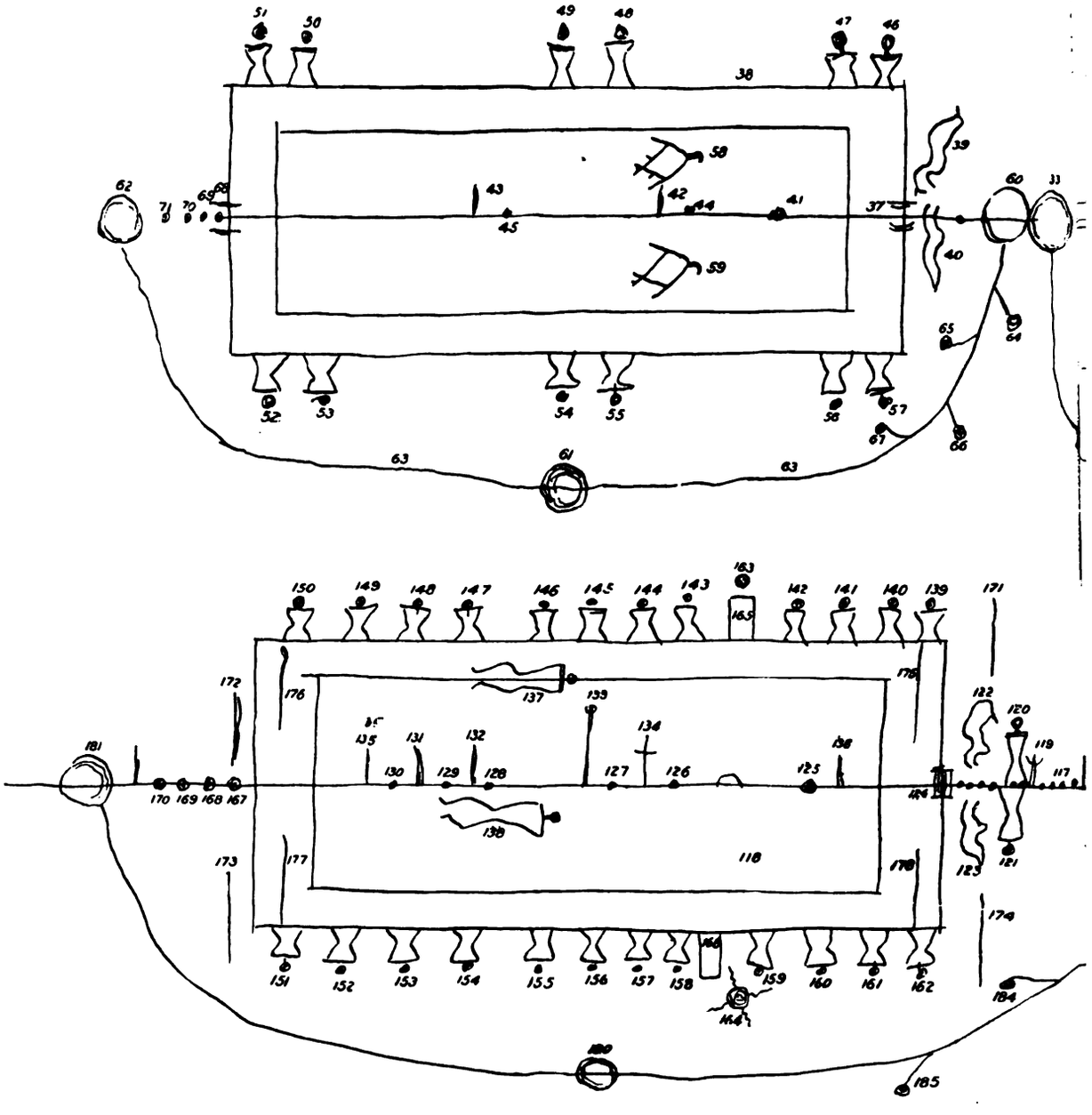
The ten small circular objects upon the upper part of the record may have been some personal marks of the original owner; their import was not known to my informants and they do not refer to any portion of the history or ceremonies or the Midē'wiwin.

Extending toward the left from the end of the fourth degree inclosure is an angular pathway (No. 99), which represents the course to be followed by the Midē' after he has attained this high distinction. On account of his position his path is often beset with dangers, as indicated by the right angles, and temptations which may lead him astray; the points at which he may possibly deviate from the true course of propriety are designated by projections branching off obliquely toward the right and left (No. 100). The ovoid figure (No. 101) at the end of this path is termed Wai-ĕk'-ma-yŏk'—End of the road—and is alluded to in the ritual, as will be observed hereafter, as the end of the world, i. e., the end of the individual's existence. The number of vertical strokes (No. 102) within the ovoid figure signify the original owner to have been a fourth degree Midē' for a period of 14 years.

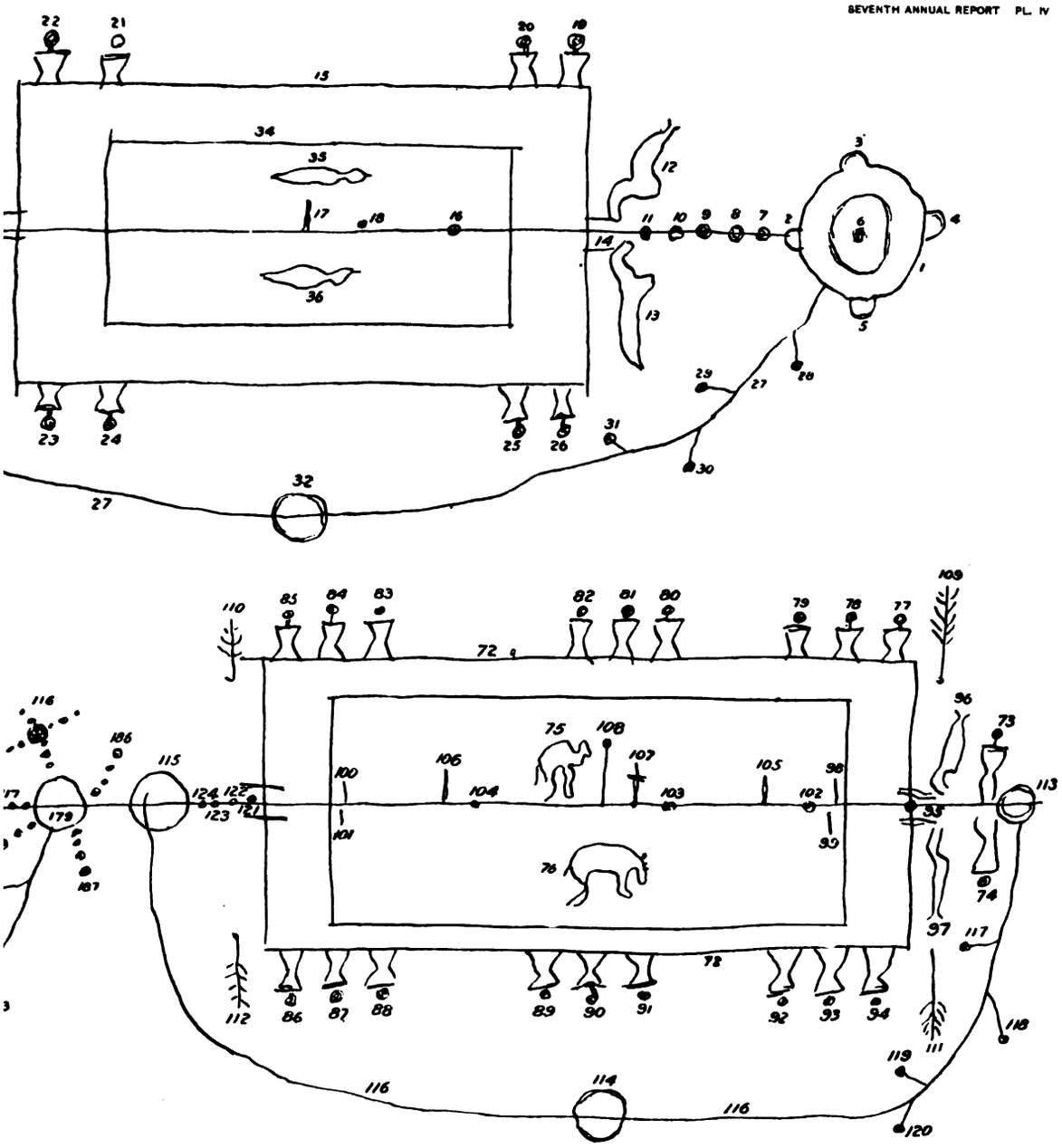
The outline of the Midē'wigân (No. 103) not only denotes that the same individual was a member of the Midē'wiwin, but the thirteen vertical strokes shown in Nos. 104 and 105 indicate that he was chief Midē' priest of the society for that number of years.

The outline of a Midē'wigân as shown at No. 106, with the place upon the interior designating the location of the sacred post (No.

BUREAU OF ETHNOLOGY



SIKAS'SIGE'S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107) and the stone (No. 108) against which the sick are placed during the time of treatment, signifies the owner to have practiced his calling of the exorcism of demons. But that he also visited the sick beyond the acknowledged jurisdiction of the society in which he resided, is indicated by the path (No. 109) leading around the sacred inclosure.

Upon that portion of the chart immediately above the fourth degree lodge is shown the outline of a Midē'wiwin (No. 110), with a path (No. 114), leading toward the west to a circle (No. 111), within which is another similar structure (No. 112) whose longest diameter is at right angles to the path, signifying that it is built so that its entrance is at the north. This is the Dzhibai' Midē'wigân or Ghost Lodge.

Around the interior of the circle are small V-shaped characters denoting the places occupied by the spirits of the departed, who are presided over by the Dzhibai' Midē', literally Shadow Midē'.

No. 113 represents the Kŏ-kó-kŏ-ō' (Owl) passing from the Midē'-wigân to the Land of the Setting Sun, the place of the dead, upon the road of the dead, indicated by the pathway at No. 114. This man'idō is personated by a candidate for the first degree of the Midē'wiwin when giving a feast to the dead in honor of the shadow of him who had been dedicated to the Midē'wiwin and whose place is now to be taken by the giver of the feast.

Upon the back of the Midē' record, above described, is the personal record of the original owner, as shown in Pl. III B. Nos. 1, 2, 3, and 4 represent the four degrees of the society into which he has been initiated, or, to use the phraseology of an Ojibwa, "through which he has gone." This "passing through" is further illustrated by the bear tracks, he having personated the Makwa' Man'idō or Bear Spirit, considered to be the highest and most powerful of the guardian spirits of the fourth degree wigwam.

The illustration presented in Pl. III C represents the outlines of a birch-bark record (reduced to one-third) found among the effects of a lately deceased Midē' from Leech Lake, Minnesota. This record, together with a number of other curious articles, composed the outfit of the Midē', but the Rev. James A. Gilfillan of White Earth, through whose courtesy I was permitted to examine the objects, could give me no information concerning their use. Since that time, however, I have had an opportunity of consulting with one of the chief priests of the Leech Lake Society, through whom I have obtained some interesting data concerning them.

The chart represents the owner to have been a Midē' of the second degree, as indicated by the two outlines of the respective structures at Nos. 1 and 2, the place of the sacred posts being marked at Nos. 3 and 4. Nos. 5, 6, 7, and 8 are Midē' priests holding their Midē' bags as in the ceremony of initiation. The disks represented at Nos.

9, 10, 11, 12, and 13 denote the sacred drum, which may be used by him during his initiation, while Nos. 14, 15, 16, and 17 denote that he was one of the four officiating priests of the Midē'wigân at his place of residence. Each of these figures is represented as holding their sacred bags as during the ceremonies. No. 18 denotes the path he has been pursuing since he became a Midē', while at Nos. 19 and 20 diverging lines signify that his course is beset with temptations and enemies, as referred to in the description of the Red Lake chart, Pl. III A.

The remaining objects found among the effects of the Midē' referred to will be described and figured hereafter.

The diagram represented on Pl. IV is a reduced copy of a record made by Sikas'sigĕ, a Mille Lacs Ojibwa Midē' of the second degree, now resident at White Earth.

The chart illustrating pictorially the general plan of the several degrees is a copy of a record in the possession of the chief Midē' at Mille Lacs in 1830, at which time Sikas'sigĕ, at the age of 10 years, received his first degree. For a number of years thereafter Sikas'sigĕ received continued instruction from his father Baiē'dzhĕk, and although he never publicly received advancement beyond the second degree of the society, his wife became a fourth degree priestess, at whose initiation he was permitted to be present.

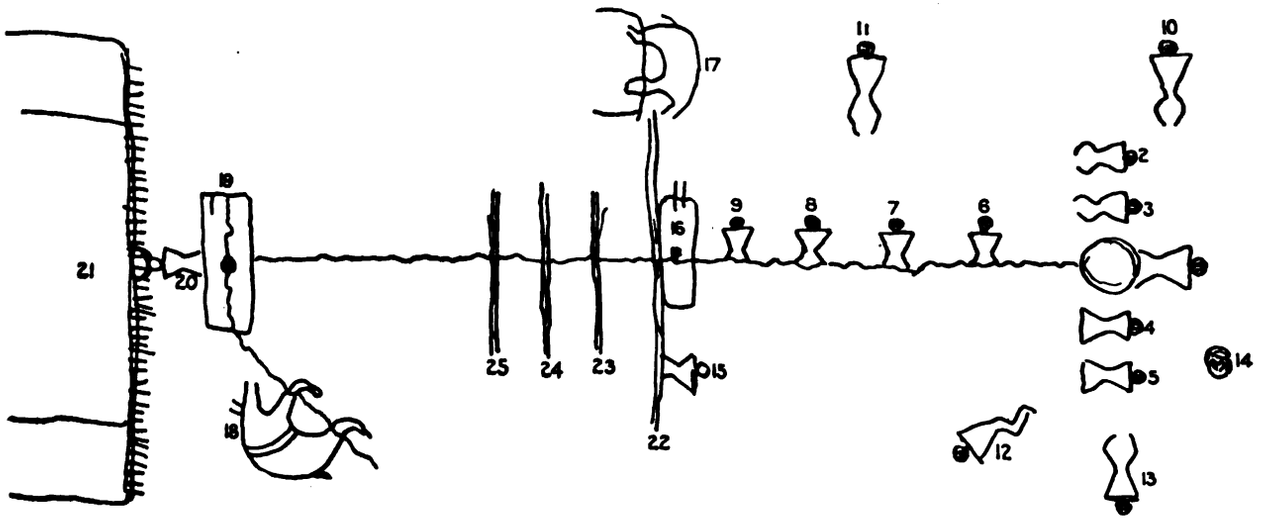
Since his residence at White Earth Sikas'sigĕ has become one of the officiating priests of the society at that place. One version given by him of the origin of the Indians is presented in the following tradition, a pictorial representation having also been prepared of which Pl. V is a reduced copy:

In the beginning, Dzhe Man'idō (No. 1), made the Midē' Man'idōs. He first created two men (Nos. 2 and 3), and two women (Nos. 4 and 5); but they had no power of thought or reason. Then Dzhe Man'idō (No. 1) made them rational beings. He took them in his hands so that they should multiply; he paired them, and from this sprung the Indians. When there were people he placed them upon the earth, but he soon observed that they were subject to sickness, misery, and death, and that unless he provided them with the Sacred Medicine they would soon become extinct.

Between the position occupied by Dzhe Man'idō and the earth were four lesser spirits (Nos. 6, 7, 8, and 9) with whom Dzhe Man'idō decided to commune, and to impart to them the mysteries by which the Indians could be benefited. So he first spoke to a spirit at No. 6, and told him all he had to say, who in turn communicated the same information to No. 7, and he in turn to No. 8, who also communed with No. 9. They all met in council, and determined to call in the four wind gods at Nos. 10, 11, 12, and 13. After consulting as to what would be best for the comfort and welfare of the Indians, these spirits agreed to ask Dzhe Man'idō to communicate the Mystery of the Sacred Medicine to the people.

Dzhe Man'idō then went to the Sun Spirit (No. 14) and asked him to go to the earth and instruct the people as had been decided upon by the council. The Sun Spirit, in the form of a little boy, went to the earth and lived with a woman (No. 15) who had a little boy of her own.

This family went away in the autum to hunt, and during the winter this woman's



ORIGIN OF ÁNI'SHINÂ'BĒG.

son died. The parents were so much distressed that they decided to return to the village and bury the body there: so they made preparations to return, and as they traveled along, they would each evening erect several poles upon which the body was placed to prevent the wild beasts from devouring it. When the dead boy was thus hanging upon the poles, the adopted child—who was the Sun Spirit—would play about the camp and amuse himself, and finally told his adopted father he pitied him, and his mother, for their sorrow. The adopted son said he could bring his dead brother to life, whereupon the parents expressed great surprise and desired to know how that could be accomplished.

The adopted boy then had the party hasten to the village, when he said, "Get the women to make a wig'iwam of bark (No. 16), put the dead boy in a covering of birch bark and place the body on the ground in the middle of the wig'iwam. On the next morning after this had been done, the family and friends went into this lodge and seated themselves around the corpse.

When they had all been sitting quietly for some time, they saw through the doorway the approach of a bear (No. 17) which gradually came towards the wig'iwam, entered it, and placed itself before the dead body and said hŭ, hŭ, hŭ, hŭ, when he passed around it towards the left side, with a trembling motion, and as he did so, the body began quivering, and the quivering increased as the bear continued until he had passed around four times, when the body came to life again and stood up. Then the bear called to the father, who was sitting in the distant right-hand corner of the wig'iwam, and addressed to him the following words:

Nōs ka-wī'-na ni'-shi-na'-bi wis-sī' a'-ya-wī'-an man'-i-dō nin-gī'-sis. Be-mai'-a-
My father is not an Indian not you are a spirit son. Inso-

mī'-nik ni'-dzhĭ man'-i-dō mī'-a-zhĭ'-gwa tshí-gĭ-a'-we-ân'. Nōs a-zhĭ'-gwa a-sē'-ma
much my fellow spirit now as you are. My father now tobacco

tshi'-a-tō'-yēk. A'-mĭ-kŭn'-dem mi-ē'-ta â'-wi-dink' dzhi-gŏsh'-kwi-tōt' wen'-dzhi-
you shall put. He speaks of only once to be able to do it why he

bi-mâ'-di-zid'-o-ma' a-gâ'-wa bi-mâ-dĭ-zĭd'-mi-o-ma'; ní-dzhĭ man'-i-dō mí-a-zhĭ'-gwa
shall live here now that he scarcely lives; my fellow spirit now I shall go

tshí-gĭ-wĕ'-ân.
home.

The little bear boy (No. 17) was the one who did this. He then remained among the Indians (No. 18) and taught them the mysteries of the Grand Medicine (No. 19); and, after he had finished, he told his adopted father that as his mission had been fulfilled he was to return to his kindred spirits, for the Indians would have no need to fear sickness as they now possessed the Grand Medicine which would enable them to live. He also said that his spirit could bring a body to life but once, and he would now return to the sun from which they would feel his influence.

This is called Kwí-wĭ-sĕns' wĕ-dī'-shĭ-tshī gē-wī-nĭp—"Little-boy-his-work."

From subsequent information it was learned that the line No. 22 denotes the earth, and that, being considered as one step in the course of initiation into the Midē'wiwin, three others must be taken before a candidate can be admitted. These steps, or rests, as they are denominated (Nos. 23, 24, and 25), are typified by four distinct gifts of goods, which must be remitted to the Midē' priests before the ceremony can take place.

Nos. 18 and 19 are repetitions of the figures alluded to in the tradition (Nos. 16 and 17) to signify that the candidate must personate the Makwa' Man'idō—Bear Spirit—when entering the Midē'wiwin (No. 19). No. 20 is the Midē' Man'idō as Ki'tshi Man'idō is termed

by the Midē' priests. The presence of horns attached to the head is a common symbol of superior power found in connection with the figures of human and divine forms in many Midē' songs and other mnemonic records. No. 21 represents the earth's surface, similar to that designated at No. 22.

Upon comparing the preceding tradition of the creation of the Indians with the following, which pertains to the descent to earth of Mi'nabō'zho, there appears to be some discrepancy, which could not be explained by Sikas'sigĕ, because he had forgotten the exact sequence of events; but from information derived from other Midē' it is evident that there have been joined together two myths, the intervening circumstances being part of the tradition given below in connection with the narrative relating to the chart on Pl. III A.

This chart, which was in possession of the Mille Lacs chief Baiē'-dzhĕk, was copied by him from that belonging to his preceptor at La Pointe about the year 1800, and although the traditions given by Sikas'sigĕ is similar to the one surviving at Red Lake, the diagram is an interesting variant for the reason that there is a greater amount of detail in the delineation of objects mentioned in the tradition.

By referring to Pl. IV it will be noted that the circle, No. 1, resembles the corresponding circle at the beginning of the record on Pl. III, A, with this difference, that the four quarters of the globe inhabited by the Ani shinâ'bēg are not designated between the cardinal points at which the Otter appeared, and also that the central island, only alluded to there (Pl. III A)' is here inserted.

The correct manner of arranging the two pictorial records, Pls. III A and IV, is by placing the outline of the earth's surface (Pl. V, No. 21) upon the island indicated in Pl. IV, No. 6, so that the former stands vertically and at right angles to the latter; for the reason that the first half of the tradition pertains to the consultation held between

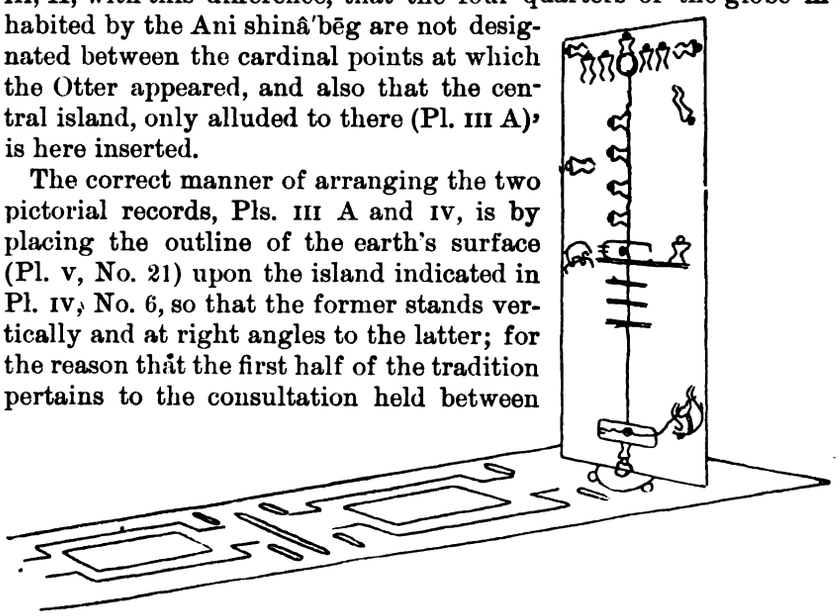


FIG. 2.—Sikas'sigĕ's combined charts, showing descent of Min'abō'zho.

Ki'tshi Man'idō and the four lesser spirits which is believed to have occurred above the earth's surface. According to Sikas'sigĕ the two charts should be joined as suggested in the accompanying illustration, Fig. 2.

Sikas'sigĕ's explanation of the Mille Lacs chart (Pl. IV) is substantially as follows:

When Mi'nabō'zho descended to the earth to give to the Ani'shinâ'bēg the Midē'wiwin, he left with them this chart. Midē'wigwas'. Ki'tshi Man'idō saw that his people on earth were without the means of protecting themselves against disease and death, so he sent Mi'nabō'zho to give to them the sacred gift. Mi'nabō'zho appeared over the waters and while reflecting in what manner he should be able to communicate with the people, he heard something laugh, just as an otter sometimes cries out. He saw something black appear upon the waters in the west (No. 2) which immediately disappeared beneath the surface again. Then it came up at the northern horizon (No. 3), which pleased Mi'nabō'zho, as he thought he now had some one through whom he might convey the information with which he had been charged by Ki'tshi Man'idō. When the black object disappeared beneath the waters at the north to reappear in the east (No. 4), Mi'nabō'zho desired it would come to him in the middle of the waters, but it disappeared to make its reappearance in the south (No. 5), where it again sank out of sight to reappear in the west (No. 2), when Mi'nabō'zho asked it to approach the center where there was an island (No. 6), which it did. This did Ni'gĭk, the Otter, and for this reason he is given charge of the first degree of the Midē'wiwin (Nos. 35 and 36) where his spirit always abides during initiation and when healing the sick.

Then Ni'gĭk asked Mi'nabō'zho, "Why do you come to this place?" When the latter said, "I have pity on the Ani'shinâ'bēg and wish to give them life; Ki'tshi Man'idō gave me the power to confer upon them the means of protecting themselves against sickness and death, and through you I will give them the Midē'wiwin, and teach them the sacred rites."

Then Mi'nabō'zho built a Midē'wigân in which he instructed the Otter in all the mysteries of the Midē'wiwin. The Otter sat before the door of the Midē'wigân four days (Nos. 7, 8, 9, and 10), sunning himself, after which time he approached the entrance (No. 14), where his progress was arrested (No. 11) by seeing two bad spirits (Nos. 12 and 13) guarding it. Through the powers possessed by Mi'nabō'zho he was enabled to pass these; when he entered the sacred lodge (No. 15), the first object he beheld being the sacred stone (No. 16) against which those who were sick were to be seated, or laid, when undergoing the ceremonial of restoring them to health. He next saw a post (No. 17) painted red with a green band around the top. A sick man would also have to pray

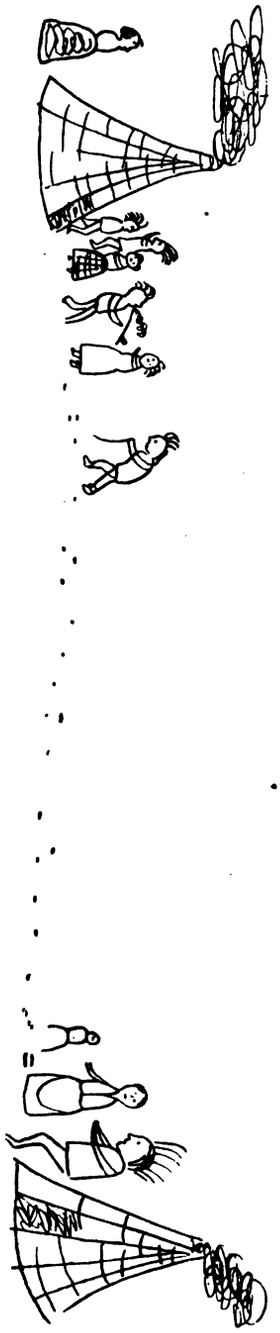


FIG. 3.—Origin of Ginseng.

to the stone and to the post, when he is within the Midē'wigân, because within them would be the Midē' spirits whose help he invoked. The Otter was then taken to the middle of the Midē'wigân where he picked up the mī'gis (No. 18) from among a heap of sacred objects which form part of the gifts given by Ki'tshi Man'idō. The eight man'idōs around the midē'wigân (Nos. 19, 20, 21, 22, 23, 24, 25, and 26) were also sent by Ki'tshi Man'idō to guard the lodge against the entrance of bad spirits.

A life is represented by the line No. 27, the signification of the short lines (Nos. 28, 29, 30, and 31) denoting that the course of human progress is beset by temptations and trials which may be the cause of one's departure from such course of conduct as is deemed proper, and the beliefs taught by the Midē'. When one arrives at middle age (No. 32) his course for the remaining period of life is usually without any special events, as indicated by the plain line No. 27, extending from middle age (No. 32) to the end of one's existence (No. 33). The short lines at Nos. 28, 29, 30, and 31, indicating departure from the path of propriety, terminate in rounded spots and signify, literally, "lecture places," because when a Midē' feels himself failing in duty or vacillating in faith he must renew professions by giving a feast and lecturing to his confreres, thus regaining his strength to resist evil doing—such as making use of his powers in harming his kinsmen, teaching that which was not given him by Ki'tshi Man'idō through Mi'nabō'zho, etc. His heart must be cleansed and his tongue guarded.

To resume the tradition of the course pursued by the Otter, Sikas'sigĕ said:

The Otter then went round the interior of the Midē'wigân (No. 34), and finally seated himself in the west, where Mi'nabō'zho shot into his body the sacred mī'gis, which was in his Midē' bag. Then Mi'nabō'zho said, "This is your lodge and you shall own it always (Nos. 35 and 36), and eight Midē' Man'idōs (Nos. 19–26) shal guard it during the night."

The Otter was taken to the entrance (No. 37) of the second degree structure (No. 38), which he saw was guarded by two evil man'idōs (Nos. 39 and 40), who opposed his progress, but who were driven away by Mi'nabō'zho. When the Otter entered at the door he beheld the sacred stone (No. 41) and two posts (Nos. 42, 43), the one nearest to him being painted red with a green band around the top, and another at the middle, with a bunch of little feathers upon the top. The other post (No. 43) was painted red, with only a band of green at the top, similar to the first degree post. Nos. 44 and 45 are the places where sacred objects and gifts are placed. This degree of the Midē'wiwin is guarded at night by twelve Midē' Man'idōs (Nos. 46 to 57) placed there by Ki'tshi Man'idō, and the degree is owned by the Thunder Bird as shown in Nos. 58, 59.

The circles (Nos. 60, 61, and 62) at either end of the outline of the structure denoting the degree and beneath it are connected by a line (No. 63) as in the preceding degree, and are a mere repetition to denote the course of conduct to be pursued by the Midē'. The points (Nos. 64, 65, 66, and 67), at the termini of the shorter lines, also refer to the feasts and lectures to be given in case of need.

To continue the informant's tradition:

When the Otter had passed around the interior of the Midē'wigân four times, he seated himself in the west and faced the degree post, when Mi'nabō'zho again shot into his body the mī'gis, which gave him renewed life. Then the Otter was told to take a "sweat bath" once each day for four successive days, so as to prepare for the next degree. (This number is indicated at the rounded spots at Nos. 68, 69, 70, and 71.)

The third degree of the Midē'wiwin (No. 72) is guarded during the day by two Midē' spirits (Nos. 73, 74) near the eastern entrance, and by the Makwa' Man'idō within the inclosure (Nos. 75 and 76), and at night by eighteen Midē' Man'idōs (Nos. 77 to 94), placed there by Ki'tshi Man'idō. When the Otter approached the entrance (No. 95) he was again arrested in his progress by two evil man'idōs (Nos. 96 and 97), who opposed his admission, but Mi'nibō'zho overcame them and the Otter entered. Just inside of the door, and on each side, the Otter saw a post (Nos. 98 and 99), and at the western door or exit two corresponding posts (Nos. 100 and 101). These symbolized the four legs of the Makwa' Man'idō, or Bear Spirit, who is the guardian by day and the owner of the third degree. The Otter then observed the sacred stone (No. 102) and the two heaps of sacred objects (Nos. 103 and 104) which Mi'nabō'zho had deposited, and three degree posts (Nos. 105, 106, and 107), the first of which (No. 105) was a plain cedar post with the bark upon it, but sharpened at the top; the second (No. 106), a red post with a green band round the top and one about the middle, as in the second degree; and the third a cross (No. 107) painted red, each of the tips painted green. [The vertical line No. 108 was said to have no relation to anything connected with the tradition.] After the Otter had observed the interior of the Midē'wigân he again made four circuits, after which he took his station in the west, where he seated himself, facing the sacred degree posts. Then Mi'nabō'zho, for the third time, shot into his body the mī'gis, thus adding to the powers which he already possessed, after which he was to prepare for the fourth degree of the Midē'wiwin.

Other objects appearing upon the chart were subsequently explained as follows:

The four trees (Nos. 109, 110, 111, and 112), one of which is planted at each of the four corners of the Midē'wigân, are usually cedar, though pine may be taken as a substitute when the former can not be had. The repetition of the circles Nos. 113, 114, and 115 and connecting line No. 116, with the short lines at Nos. 117, 118, 119, and 120, have the same signification as in the preceding two degrees.

After the Otter had received the third degree he prepared himself for the fourth, and highest, by taking a steam bath once a day for four successive days (Nos. 121, 122, 123, and 124). Then, as he proceeded toward the Midē'wigân he came to a wig'iwam made of brush (No. 179), which was the nest of Makwa' Man'idō, the Bear Spirit, who guarded the four doors of the sacred structure.

The four rows of spots have reference to the four entrances of the Midē'wigân of the fourth degree. The signification of the spots near the larger circle, just beneath the "Bear's nest" could not be explained by Sikas'sigĕ, but the row of spots (No. 117) along the horizontal line leading to the entrance of the inclosure were denominated steps, or stages of progress, equal to as many days—one spot denoting one day—which must elapse before the Otter was permitted to view the entrance.

When the Otter approached the fourth degree (No. 118) he came to a short post

(No. 119) in which there was a small aperture. The post was painted green on the side from which he approached and red upon the side toward the Midē'wigân [see Fig. 4.] But before he was permitted to look through it he rested and invoked the favor of Ki'tshi Man'idō, that the evil man'idōs might be expelled from his path. Then, when the Otter looked through the post, he saw that the interior of the inclosure was filled with Midē' Man'idos, ready to receive him and to attend during his initiation. The two Midē' Man'idos at the outside of the eastern entrance (Nos. 120 and 121) compelled the evil man'idōs (Nos. 122 and 123) to depart and permit the Otter to enter at the door (No. 124). Then the Otter beheld the sacred stone (No. 125) and the five heaps of sacred objects which Minabō'zho had deposited (Nos. 126, 127, 128, 129, and 130) near the four degree posts (Nos. 131, 132, 133, and 134). According to their importance, the first was painted red, with a green band about the top; the second was painted red, with two green bands, one at the top and another at the middle; the third consisted of a cross painted red, with the tips of the arms and the top of the post painted green; while the fourth was a square post, the side toward the east being painted white, that toward the south green, that toward the west red, and that toward the north black.

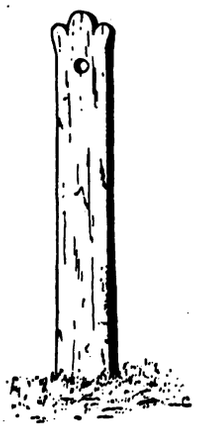


FIG. 4.—Peep-hole post.

The two sets of sticks (Nos. 135 and 136) near the eastern and western doors represent the legs of Makwa' Man'idō, the Bear Spirit. When the Otter had observed all these things he passed round the interior of the Midē'wigân four times, after which he seated himself in the west, facing the degree posts, when Mi'nabō'zho approached him and for the fourth time shot into his body the sacred mī'gis, which gave him life that will endure always. Then Mi'nabō'zho said to the Otter, "This degree belongs to Ki'tshi Man'ido, the Great Spirit (Nos. 137 and 138), who will always be present when you give the sacred rite to any of your people." At night the Midē' Man'idōs (Nos. 139 to 162) will guard the Midē'wigân, as they are sent by Ki'tshi Man'ido to do so. The Bear's nest (Nos. 163 and 164) just beyond the northern and southern doors (Nos. 165 and 166) of the Midē'wigân are the places where Makwa' Man'idō takes his station when guarding the doors.

Then the Otter made a wig'iwam and offered four prayers (Nos. 167, 168, 169, and 170) for the rites of the Midē'wiwin, which Ki'tshi Man'idō had given him.

The following supplemental explanations were added by Sikas'-sigĕ, viz: The four vertical lines at the outer angles of the lodge structure (Nos. 171, 172, 173, and 174), and four similar ones on the inner corners (Nos. 175, 176, 177, and 178), represent eight cedar trees planted there by the Midē' at the time of preparing the Midē'wigân for the reception of candidates. The circles Nos. 179, 180, and 181, and the connecting line, are a reproduction of similar ones shown in the three preceding degrees, and signify the course of a Midē's life—that it should be without fault and in strict accordance with the teachings of the Midē'wiwin. The short lines, terminating in circles Nos. 182, 183, 184, and 185, allude to temptations which beset the Midē's path, and he shall, when so tempted, offer at these points feasts and lectures, or, in other words, "professions of faith." The three lines Nos. 186, 187, and 188, consisting of four

OJIBWA FACIAL DECORATION.

spots each, which radiate from the larger circle at No. 179 and that before mentioned at No. 116, symbolize the four bear nests and their respective approaches, which are supposed to be placed opposite the four doors of the fourth degree; and it is obligatory, therefore, for a candidate to enter these four doors on hands and knees when appearing for his initiation and before he finally waits to receive the concluding portion of the ceremony.

The illustration presented in Fig. 5 is a reduced copy of a drawing made by Sikas'sigĕ to represent the migration of the Otter toward the west after he had received the rite of the Midē'wiwin. No. 1 refers to the circle upon the large chart on Pl. III A, No. 1, and signifies the earth's surface as before described. No. 2 in Fig. 5 is a line separating the history of the Midē'wiwin from that of the migration as follows: When the Otter had offered four prayers, as above mentioned, which fact is referred to by the spot No. 3, he disappeared beneath the surface of the water and went toward the west, whither the Ani'shinâ'bēg followed him, and located at Ottawa Island (No. 4). Here they erected the Midē'wigân and lived for many years. Then the Otter again disappeared beneath the water, and in a short time reappeared at A'wiat'ang (No. 5), when the Midē'wigân was again erected and the sacred rites conducted in accordance with the teachings of Mi'nabō'zho. Thus was an interrupted migration continued, the several resting places being given below in their proper order, at each of which the rites of the Midē'wiwin were conducted in all their purity. The next place to locate at was Mi'shenama'kinagung — Mackinaw

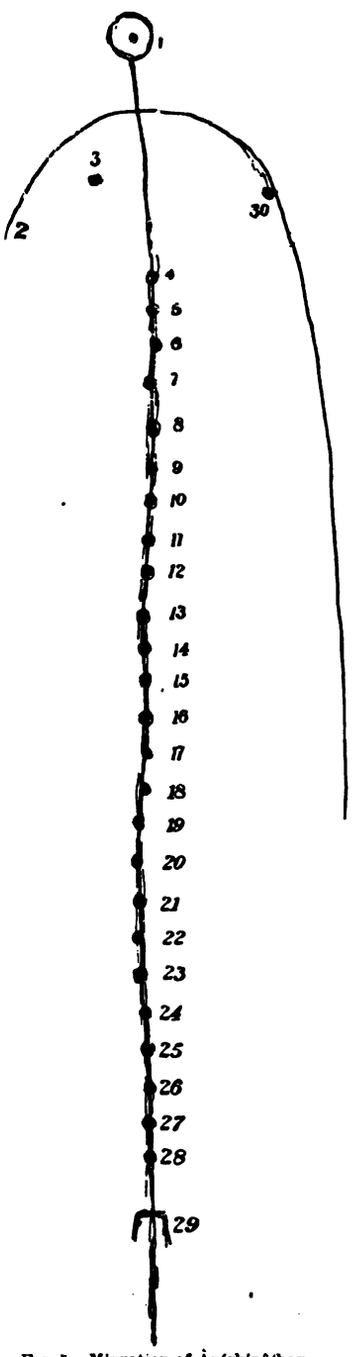


FIG. 5.—Migration of Ânishinâ'beg.

(No. 6); then Ne'mikung (No. 7); Kiwe'winang' (No. 8); Bâwating—Sault Ste. Marie (No. 9); Tshiwi'towi' (No. 10); Nega'wadzhĕ'ŭ—Sand Mountain (No. 11), northern shore of Lake Superior; Mi'nisa'wĭk [Mi'nisa'bikkăng]—Island of rocks (No. 12); Kawa'sitshĭŭwongk—Foaming rapids (No. 13); Mush'kisi'wi [Mash'kisi'bi]—Bad River (No. 14); Shagawâmikongk—Long-sand-bar-beneath the-surface (No. 15); Wikwe'dâⁿwonggâⁿ—Sandy Bay (No. 16); Neâ'shiwikongk—Cliff Point (No. 17); Netâⁿ'wayaⁿ'sink—Little point-of-sand-bar (No. 18); Aⁿ'nibiⁿs—Little elm tree (No. 19); Wikup'biⁿmiⁿsh—literally, Little-island-basswood (No. 20); Makubiⁿ'miⁿsh—Bear Island (No. 21); Sha'geski'ke'dawan'ga (No. 22); Ni'wigwas'sikongk—The place where bark is peeled (No. 23); Ta'pakwe'ĭkak [Sa'apakwe'shkwaokongk]—The-place-where-lodge-bark-is-obtained (No. 24); Ne'uwesak'kudeze'bi [Ne'wisaku'desi'biⁿ]—Point-dead-wood-timber river (No. 25); Aⁿnibi'kanzi'bi [modern name, Âsh'kiba'gisi'bi], given respectively as Fish spawn River and Green leaf River (No. 26).

This last-named locality is said to be Sandy Lake, Minnesota, where the Otter appeared for the last time, and where the Midē'wigân was finally located. From La Pointe, as well as from Sandy Lake, the Ojibwa claim to have dispersed in bands over various portions of the territory, as well as into Wisconsin, which final separation into distinct bodies has been the chief cause of the gradual changes found to exist in the ceremonies of the Midē'wiwin.

According to Sikas'sigĕ, the above account of the initiation of the Otter, by Mi'nabo'zho, was adopted as the course of initiation by the Midē' priests of the Mille Lacs Society, when he himself received the first degree, 1830. At that time a specific method of facial decoration was pursued by the priests of the respective degrees (Pl. VI), each adopting that pertaining to the highest degree to which he was entitled, viz:

First degree.—A broad band of green across the forehead and a narrow stripe of vermilion across the face, just below the eyes.

Second degree.—A narrow stripe of vermilion across the temples, the eyelids, and the root of the nose, a short distance above which is a similar stripe of green, then another of vermilion, and above this again one of green.

Third degree.—Red and white spots are daubed all over the face, the spots being as large as can be made by the finger tips in applying the colors.

Fourth degree.—Two forms of decoration were admissible; for the first, the face was painted with vermilion, with a stripe of green extending diagonally across it from the upper part of the left temporal region to the lower part of the right cheek; for the second, the face was painted red with two short, horizontal parallel bars of

green across the forehead. Either of these was also employed as a sign of mourning by one whose son has been intended for the priesthood of the Midē'wiwin, but special reference to this will be given in connection with the ceremony of the Dzhibai' Midē'wigân, or Ghost Society.

On Pl. VIII is presented a reduced copy of the Midē' chart made by Ojibwa, a Midē' priest of the fourth degree and formerly a member of the society of the Sandy Lake band of the Mississippi Ojibwa. The illustration is copied from his own chart which he received in 1833 in imitation of that owned by his father, Me'toshi'-kō"sh; and this last had been received from Lake Superior, presumably La Pointe, many years before.

The illustration of the four degrees are here represented in profile, and shows higher artistic skill than the preceding copies from Red Lake, and Mille Lacs.

The information given by Ojibwa, regarding the characters is as follows:

When Ki'tshi Man'idō had decided to give to the Ani'shinâ'bēg the rites of the Midē'wiwin, he took his Midē' drum and sang, calling upon the other Man'idōs to to join him and to hear what he was going to do. No. 1 represents the abode in the sky of Ki'tshi Man'idō, No. 2, indicating the god as he sits drumming, No. 3. the small spots surrounding the drum denoting the mī'gis with which everything about him is covered. The Midē' Man'idōs came to him in his Midē'wigân (No. 4), eleven of which appear upon the inside of that structure, while the ten—all but himself—upon the outside (Nos. 5 to 14) are represented as descending to the earth, charged with the means of conferring upon the Ani'shinâbē'g the sacred rite. In the Midē'-wigân (No. 4) is shown also the sacred post (No. 15) upon which is perched Kŏ-ko'-kŏ-ō'—the Owl (No. 16). The line traversing the structure, from side to side, represents the trail leading through it, while the two rings (Nos. 17 and 18) upon the right side of the post indicate respectively the spot where the presents are deposited and the sacred stone—this according to modern practices.

When an Indian is prepared to receive the rights of initiation he prepares a wig'i-wam (No. 19) in which he takes a steam bath once each day for four successive days. The four baths and four days are indicated by the number of spots at the floor of the lodge, representing stones. The instructors, employed by him, and the officiating priests of the society are present, one of which (No. 20) may be observed upon the left of the wig'iwam in the act of making an offering of smoke, while the one to the right (No. 21) is drumming and singing. The four officiating priests are visible to either side of the candidate within the structure. The wig'iwams (Nos. 22, 23, 24, and 25) designate the village habitations.

In the evening of the day preceding the initiation, the candidate (No. 26) visits his instructor (No. 27) to receive from him final directions as to the part to be enacted upon the following day. The candidate is shown in the act of carrying with him his pipe, the offering of tobacco being the most acceptable of all gifts. His relatives follow and carry the goods and other presents, some of which are suspended from the branches of the Midē' tree (No. 28) near the entrance of the first degree structure. The instructor's wig'iwam is shown at No. 29, the two dark circular spots upon the floor showing two of the seats, occupied by instructor and pupil. The figure No. 27 has his left arm elevated, denoting that his conversation pertains to Ki'tshi Man'idō, while in his right hand he holds his Midē' drum. Upon the fol-

lowing morning the Midē' priests, with the candidate in advance (No. 30), approach and enter the Midē'wigân and the initiation begins. No. 31 is the place of the sacred drum and those who are detailed to employ the drum and rattles, while No. 32 indicates the officiating priests; No. 33 is the degree post, surmounted by Kŏ-ko'-kŏ-ō', the Owl (No. 34). The post is painted with vermilion, with small white spots all over its surface, emblematic of the mī'gis shell. The line (No. 35) extending along the upper portion of the inclosure represents the pole from which are suspended the robes, blankets, kettles, etc., which constitute the fee paid to the society for admission.

This degree is presided over and guarded by the Panther Man'idō.

When the candidate has been able to procure enough gifts to present to the society for the second degree, he takes his drum and offers chants (No. 35) to Ki'tshi Man'idō for success. Ki'tshi Man'idō himself is the guardian of the second degree and his footprints are shown in No. 36. No. 37 represents the second degree inclosure, and contains two sacred posts (Nos. 38 and 39), the first of which is the same as that of the first degree, the second being painted with white clay, bearing two bands of vermilion, one about the top and one near the middle. A small branch near the top is used, after the ceremony is over, to hang the tobacco pouch on. No. 40 represents the musicians and attendants; No. 41 the candidate upon his knees; while Nos. 42, 43. 44, and 45 pictures the officiating priests who surround him. The horizontal pole (No. 46) has presents of robes, blankets, and kettles suspended from it.

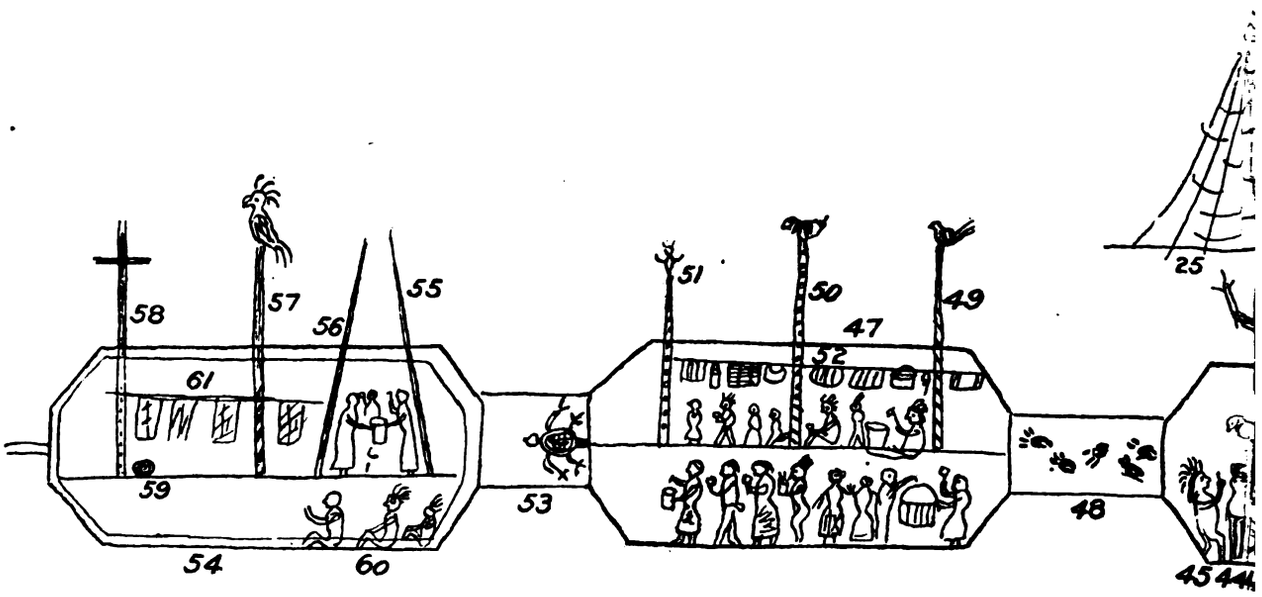
When a candidate is prepared to advance to the third degree (No. 47) he personates Makwa' Man'idō, who is the guardian of this degree, and whose tracks (No. 48) are visible. The assistants are visible upon the interior, drumming and dancing. There are three sacred posts, the first (No. 49) is black, and upon this is placed Kŏ-ko'-kŏ-ō'—the Owl; the second (No. 50) is painted with white clay and has upon the top the effigy of an owl; while the third (No. 51) is painted with vermilion, bearing upon the summit the effigy of an Indian. Small wooden effigies of the human figure are used by the Midē' in their tests of the proof of the genuineness and sacredness of their religion, which tests will be alluded to under another caption. The horizontal rod (No. 52), extending from one end of the structure to the other, has suspended from it the blankets and other gifts.

The guardian of the fourth degree is Maka'no—the Turtle—as he appears (No. 53) facing the entrance of the fourth degree (No. 54). Four sacred posts are planted in the fourth degree; the first (No. 55), being painted white upon the upper half and green upon the lower; the second (No. 56) similar; the third (No. 57) painted red, with a black spiral line extending from the top to the bottom, and upon which is placed Kŏ-ko'-kŏ-ō'—the Owl; and the fourth (No. 58), a cross, the arms and part of the trunk of which is white, with red spots—to designate the sacred mī'gis—the lower half of the trunk cut square, the face toward the east painted red, the south green, the west white, and the north black. The spot (No. 59) at the base of the cross signifies the place of the sacred stone, while the human figures (No. 60) designate the participants, some of whom are seated near the wall of the inclosure, whilst others are represented as beating the drum. Upon the horizontal pole (No. 61) are shown the blankets constituting gifts to the society.

The several specific methods of facial decoration employed (Pl. VII), according to Ojibwa's statement, are as follows:

First degree.—One stripe of vermilion across the face, from near the ears across the tip of the nose.

Second degree.—One stripe as above, and another across the eyelids, temples, and the root of the nose.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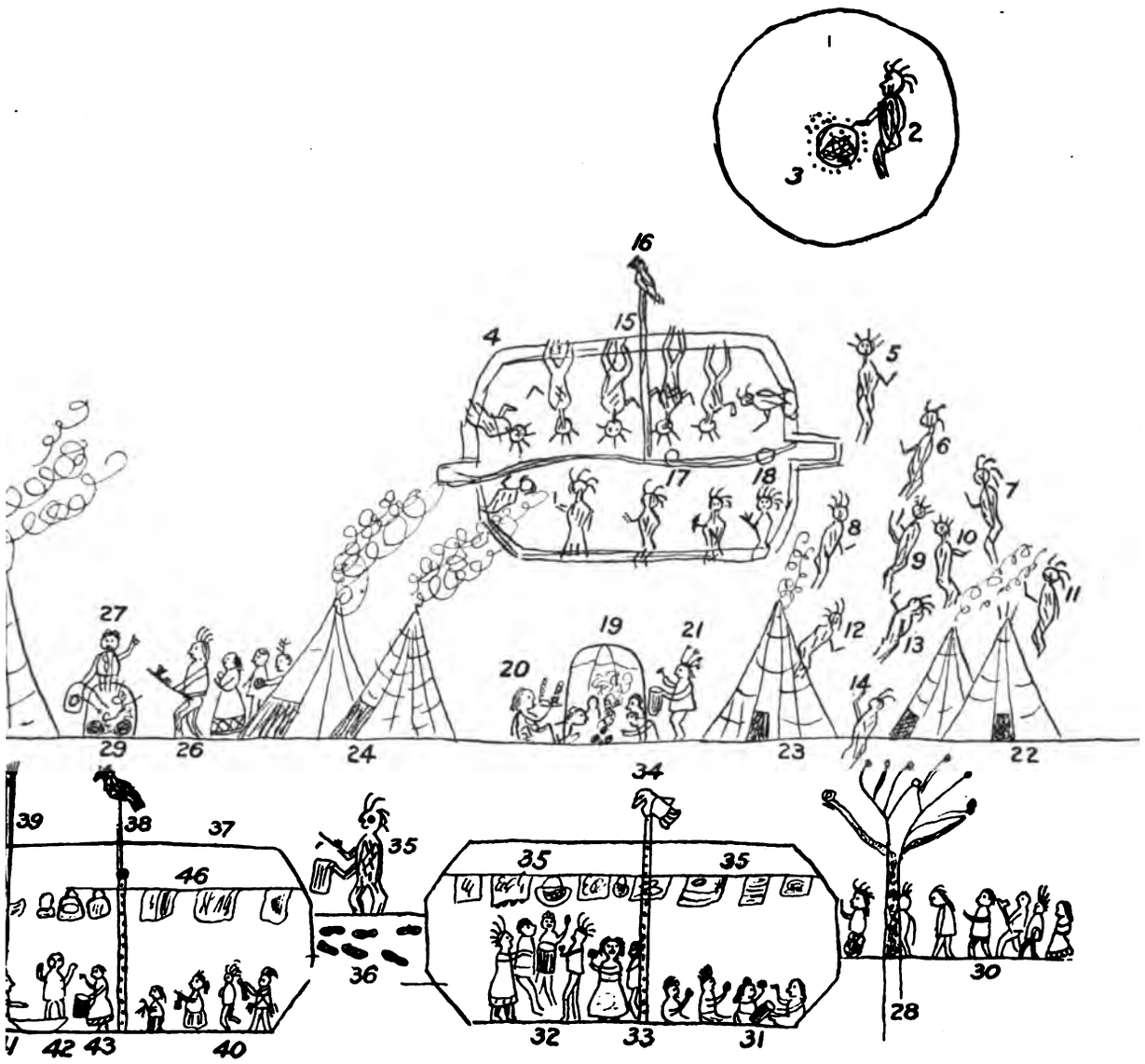
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ECORD.

Third degree.—The upper half of the face is painted green and the lower half red.

Fourth degree.—The forehead and left side of the face, from the outer canthus of the eye downward, is painted green; four spots of vermilion are made with the tip of the finger upon the forehead and four upon the green surface of the left cheek. In addition to this, the plumes of the golden eagle, painted red, are worn upon the head and down the back. This form of decoration is not absolutely necessary, as the expense of the "war bonnet" places it beyond the reach of the greater number of persons.

Before proceeding further with the explanation of the Midē' records it may be of interest to quote the traditions relative to the migration of the Ani'shinâ'bēg, as obtained by Mr. Warren previous to 1853. In his reference to observing the rites of initiation he heard one of the officiating priests deliver "a loud and spirited harangue," of which the following words[1] caught his attention:

Our forefathers were living on the great salt water toward the rising sun, the great Megis (seashell) showed itself above the surface of the great water and the rays of the sun for a long time period were reflected from its glossy back. It gave warmth and light to the An-ish-in-aub-ag (red race). All at once it sank into the deep, and for a time our ancestors were not blessed with its light. It rose to the surface and appeared again on the great river which drains the waters of the Great Lakes, and again for a long time it gave life to our forefathers and reflected back the rays of the sun. Again it disappeared from sight and it rose not till it appeared to the eyes of the An-ish-in-aub-ag on the shores of the first great lake. Again it sank from sight, and death daily visited the wigiwams of our forefathers till it showed its back and reflected the rays of the sun once more at Bow-e-ting (Sault Ste. Marie). Here it remained for a long time, but once more, and for the last time, it disappeared, and the An-ish-in-aub-ag was left in darkness and misery, till it floated and once more showed its bright back at Mo-ning-wun-a-kaun-ing (La Pointe Island), where it has ever since reflected back the rays of the sun and blessed our ancestors with life, light, and wisdom. Its rays reach the remotest village of the widespread Ojibways." As the old man delivered this talk he continued to display the shell, which he represented as an emblem of the great megis of which he was speaking.

A few days after, anxious to learn the true meaning of this allegory, * * * I requested him to explain to me the meaning of his Me-da-we harangue.

After filling his pipe and smoking of the tobacco I had presented he proceeded to give me the desired information, as follows:

"My grandson," said he, "the megis I spoke of means the Me-da-we religion. Our forefathers, many string of lives ago, lived on the shores of the great salt water in the east. Here, while they were suffering the ravages of sickness and death, the Great Spirit, at the intercession of Man-a-bo-sho, the great common uncle of the An-ish-in-aub-ag, granted them this rite, wherewith life is restored and prolonged. Our forefathers moved from the shores of the great water and proceeded westward.

"The Me-da-we lodge was pulled down, and it was not again erected till our forefathers again took a stand on the shores of the great river where Mo-ne-aung (Montreal) now stands.

"In the course of time this town was again deserted, and our forefathers, still

[1] Op. cit., p. 78 et seq.

proceeding westward, lit not their fires till they reached the shores of Lake Huron, where again the rites of the Me-da-we were practiced.

"Again these rites were forgotten, and the Me-da-we lodge was not built till the Ojibways found themselves congregated at Bow-e-ting (outlet of Lake Superior), where it remained for many winters. Still the Ojibways moved westward, and for the last time the Me-da-we lodge was erected on the island of La Pointe, and here, long before the pale face appeared among them, it was practiced in its purest and most original form. Many of our fathers lived the full term of life granted to mankind by the Great Spirit, and the forms of many old people were mingled with each rising generation. This, my grandson, is the meaning of the words you did not understand; they have been repeated to us by our fathers for many generations."

In the explanation of the chart obtained at Red Lake, together with the tradition, reference to the otter, as being the most sacred emblem of society, is also verified in a brief notice of a tradition by Mr. Warren,[1] as follows:

There is another tradition told by the old men of the Ojibway village of Fond du Lac, Lake Superior, which tells of their former residence on the shores of the great salt water. It is, however, so similar in character to the one I have related that its introduction here would only occupy unnecessary space. The only difference between the two traditions is that the otter, which is emblematical of one of the four Medicine Spirits who are believed to preside over the Midawe rites, is used in one in the same figurative manner as the seashell is used in the other, first appearing to the ancient An-ish-in-aub-ag from the depths of the great salt water, again on the river St. Lawrence, then on Lake Huron at Sault Ste. Marie, again at La Pointe, but lastly at Fond du Lac, or end of Lake Superior, where it is said to have forced the sand bank at the mouth of the St. Louis River. The place is still pointed out by the Indians where they believe the great otter broke through.

It is affirmed by the Indians that at Sault Ste. Marie some of the Ojibwa separated from the main body of that tribe and traversed the country along the northern shore of Lake Superior toward the west. These have since been known of as the "Bois Forts" (hardwood people or timber people), other bands being located at Pigeon River, Rainy Lake, etc. Another separation occurred at La Pointe, one party going toward Fond du Lac and westward to Red Lake, where they claim to have resided for more than three hundred years, while the remainder scattered from La Pointe westward and southwestward, locating at favorable places throughout the timbered country. This early dismemberment and long-continued separation of the Ojibwa nation accounts, to a considerable extent, for the several versions of the migration and the sacred emblems connected with the Midē'wiwin, the northern bands generally maintaining their faith in favor of the Otter as the guide, while the southern bodies are almost entirely supporters of the belief in the great mī'gis.

On account of the independent operations of the Midē' priests in the various settlements of the Ojibwa, and especially because of the slight intercourse between those of the northern and southern divisions of the nation, there has arisen a difference in the pictographic

[1] Op. cit., p. 81.

representation of the same general ideas, variants which are frequently not recognized by Midē′ priests who are not members of the Midē′wiwin in which these mnemonic charts had their origin. As there are variants in the pictographic delineation of originally similar ideas, there are also corresponding variations in the traditions pertaining to them.

The tradition relating to Mi′nabō′zho and the sacred objects received from Ki′tshi Man′idō for the Ani′shinâ′bēg is illustrated in Fig. 6, which is a reproduction of a chart preserved at White Earth.

FIG. 6.—Birch-bark record, from White Earth.

The record is read from left to right. No. 1 represents Mi′nabō′zho, who says of the adjoining characters representing the members of the Midē′wiwin: "They are the ones, they are the ones, who put into my heart the life." Mi′nabō′zho holds in his left hand the sacred Midē′ sack, or pin-ji′-gu-sân′. Nos. 2 and 3 represent the drummers. At the sound of the drum all the Midē′ rise and become inspired, because Ki′tshi Man′idō is then present in the wig′iwam. No. 4 denotes that women also have the privilege of becoming members of the Midē′wiwin. The figure holds in the left hand the Midē′ sack, made of a snake skin. No. 5 represents the Tortoise, the guardian spirit who was the giver of some of the sacred objects used in the rite. No. 6, the Bear, also a benevolent Man′idō, but not held in so great veneration as the Tortoise. His tracks are visible in the Midē′-wiwin. No. 7, the sacred Midē′ sack or pin-ji′-gu-sân′, which contains life, and can be used by the Midē′ to prolong the life of a sick person. No. 8 represents a Dog, given by the Midē′ Man′idōs to Mi′nabō′zho as a companion.

Such was the interpretation given by the owner of the chart, but the informant was unconsciously in error, as has been ascertained not only from other Midē′ priests consulted with regard to the true meaning, but also in the light of later information and research in the exemplification of the ritual of the Midē′wiwin.

Mi′nabō′zho did not receive the rite from any Midē′ priests (Nos. 2 and 5), but from Ki′tshi Man′idō. Women are not mentioned in any of the earlier traditions of the origin of the society, neither was the dog given to Mi′nabō′zho, but Mi′nabō′zho gave it to the Ani′shinâ′bēg.

The chart, therefore, turns out to be a mnemonic song similar to others to be noted hereafter, and the owner probably copied it from

a chart in the possession of a stranger Midē', and failed to learn its true signification, simply desiring it to add to his collection of sacred objects and to gain additional respect from his confrères and admirers.

Two similar and extremely old birch-bark mnemonic songs were found in the possession of a Midē' at Red Lake. The characters upon these are almost identical, one appearing to be a copy of the other. These are reproduced in Figs. 7 and 8. By some of the Midē' Esh'gibō'ga takes the place of Mi'nabō'zho as having originally received the Midē'wiwin from Ki'tshi Man'idō, but it is believed that the word is a synonym or a substitute based upon some reason to them inexplicable. These figures were obtained in 1887, and a brief explanation of them given in the American Anthropologist.[1] At that time I could obtain but little direct information from the owners of the records, but it has since been ascertained that both are mnemonic songs pertaining to Mi'nabō'zho, or rather Eshgibō'ga, and do not form a part of the sacred records of the Midē'wiwin, but simply the pictographic representation of the possibilities and powers of the alleged religion. The following explanation of Figs. 7 and 8 is re-

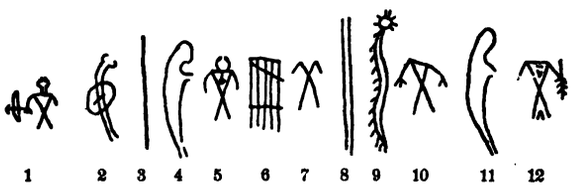


FIG. 7.—Birch-bark record, from Red Lake.

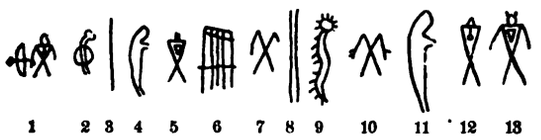


FIG. 8.—Birch-bark record, from Red Lake.

produced from the work just cited. A few annotations and corrections are added. The numbers apply equally to both illustrations:

No. 1, represents Esh'gibō'ga, the great uncle of the Ani'shinâ'bēg, and receiver of the Midē'wiwin.

No. 2, the drum and drumsticks used by Esh'gibō'ga.

No. 3, a bar or rest, denoting an interval of time before the song is resumed.

No. 4, the pin-ji'-gu-sân' or sacred Midē' sack. It consists of an otter skin, and is the mī'gis or sacred symbol of the Midē'wigân.

No. 5, a Midē' priest, the one who holds tho mī'gis while chanting the Midē' song in the Midē'wigân. He is inspired, as indicated by the line extending from the heart to the mouth.

[1] Vol. 1, No. 3, 1888, p. 216, Figs. 2 and 3.

No. 6, denotes that No. 5 is a member of the Midē'wiwin. This character, with the slight addition of lines extending upward from the straight top line, is usually employed by the more southern Ojibwa to denote the wig'iwam of a Jĕss'akkĭd', or jugglery.

No. 7, is a woman, and signifies that women may also be admitted to the Midē'wiwin.

No. 8, a pause or rest.

No. 9, a snake-skin pin-ji'-gu-sân' possessing the power of giving life. This power is indicated by the lines radiating from the head, and the back of the skin.

No. 10, represents a woman.

No. 11, is another illustration of the mī'gis, or otter.

No. 12, denotes a priestess who is inspired, as shown by the line extending from the heart to the mouth in Fig. 7, and simply showing the heart in Fig. 6. In the latter she is also empowered to cure with magic plants.

No. 13, in Fig. 7, although representing a Midē' priest, no explanation was given.

Fig. 9 is presented as a variant of the characters shown in No. 1 of Figs. 7 and 8. The fact that this denotes the power of curing by the use of magic plants would appear to indicate an older and more appropriate form than the delineation of the bow and arrows, as well as being more in keeping with the general rendering of the tradition.

FIG. 9.
Esh'gibō'ga.

MIDĒ'WIGÂN.

Initiation into the Midē'wiwin or Midē' Society is, at this time, performed during the latter part of summer. The ceremonies are performed in public, as the structure in which they are conducted is often loosely constructed of poles with intertwined branches and leaves, leaving the top almost entirely exposed, so that there is no difficulty in observing what may transpire within. Furthermore, the ritual is unintelligible to the uninitiated, and the important part of the necessary information is given to the candidate in a preceptor's wig'iwam.

To present intelligibly a description of the ceremonial of initiation as it occurred at White Earth, Minnesota, it will be necessary to first describe the structure in which it occurs, as well as the sweat lodge with which the candidate has also to do.

The Midē'wigân, i. e., Midē'wig'iwam, or, as it is generally designated "Grand Medicine Lodge," is usually built in an open grove or clearing; it is a structure measuring about 80 feet in length by 20 in width, extending east and west with the main entrance toward that point of the compass at which the sun rises. The walls consist of poles and saplings from 8 to 10 feet high, firmly planted in the ground, wattled with short branches and twigs with leaves. In the east and west walls are left open spaces, each about 4 feet wide,

used as entrances to the inclosure. From each side of the opening the wall-like structure extends at right angles to the end wall, appearing like a short hallway leading to the inclosure, and resembles double doors opened outward. Fig. 10 represents a ground plan of the Midē'wigân, while Fig. 11 shows an interior view. Saplings thrown across the top of the structure serve as rafters, upon which are laid branches with leaves, and pieces of bark; to sufficiently shade the occupants from the rays of the sun. Several saplings extend across the inclosure near the top, while a few are attached to these so as to extend longitudinally, from either side of which presents of blankets, etc., may be suspended. About 10 feet from the main entrance a large flattened stone, measuring more than a foot in diameter, is placed upon the ground. This is used when subjecting to treatment a patient; and at a corresponding distance from the western door is planted the sacred Midē' post of cedar, that for the first degree being about 7 feet in height and 6 or 8 inches in diameter. It is painted red, with a band of green 4 inches wide around the top. Upon the post is fixed the stuffed body of an owl. Upon that part of the floor midway

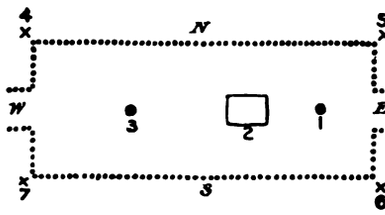


FIG. 10.—Diagram of Midē'wigân of the first degree.

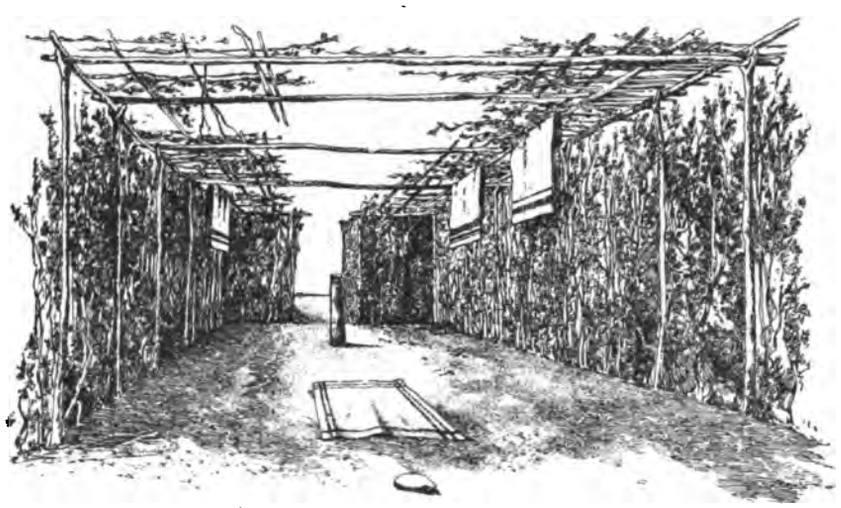


FIG. 11.—Interior of Midē'wigân.

between the stone and the Midē' post is spread a blanket, upon which the gifts and presents to the society are afterward deposited. A short distance from each of the outer angles of the structure are planted cedar or pine trees, each about 10 feet in height.

About a hundred yards east of the main entrance is constructed a wig'iwam or sweat lodge, to be used by the candidate, both to take his vapor baths and to receive final instructions from his preceptor.

This wig'iwam is dome-shaped measures about 10 feet in diameter and 6 feet high in the middle, with an opening at the top which can be readily covered with a piece of bark. The framework of the structure consists of saplings stuck into the ground, the tops being bent over to meet others from the opposite side. Other thin saplings are then lashed horizontally to the upright ones so as to appear like hoops, decreasing in size as the summit is reached. They are secured by using strands of basswood bark. The whole is then covered with pieces of birchbark—frequently the bark of the pine is used—leaving a narrow opening on the side facing the Midē'wigân, which may be closed with an adjustable flap of bark or blankets.

The space between the Midē'wigân and the sweat lodge must be kept clear of other temporary shelters, which might be placed there by some of the numerous visitors attending the ceremonies.

FIRST DEGREE.

PREPARATORY INSTRUCTION.

When the candidate's application for reception into the Midē'wiwin has been received by one of the officiating priests, he calls upon the three assisting Midē', inviting them to visit him at his own wig'iwam at a specified time. When the conference takes place, tobacco, which has been previously furnished by the candidate, is distributed and a smoke offering made to Ki'tshi Man'idō, to propitiate his favor in the deliberations about to be undertaken. The host then explains the object of the meeting, and presents to his auditors an account of the candidate's previous life; he recounts the circumstances of his fast and dreams, and if the candidate is to take the place of a lately deceased son who had been prepared to receive the degree, the fact is mentioned, as under such circumstances the forms would be different from the ordinary method of reception into the society. The subject of presents and gifts to the individual members of the society, as well as those intended to be given as a fee to the officiating priests, is also discussed; and lastly, if all things are favorable to the applicant, the selection of an instructor or preceptor is made, this person being usually appointed from among these four priests.

When the conference is ended the favorable decision is announced to the applicant, who acknowledges his pleasure by remitting to each of the four priests gifts of tobacco. He is told what instructor would be most acceptable to them, when he repairs to the wig'iwam of the person designated and informs him of his wish and the decision of the Midē' council.

The designated preceptor arranges with his pupil to have certain days upon which the latter is to call and receive instruction and ac-

quire information. The question of remuneration being settled, tobacco is furnished at each sitting, as the Midē' never begins his lecture until after having made a smoke-offering, which is done by taking a whiff and pointing the stem to the east; then a whiff, directing the stem to the south; another whiff, directing the stem to the west; then a whiff and a similar gesture with the stem to the north; another whiff is taken slowly and with an expression of reverence, when the stem is pointed forward and upward as an offering to Ki'tshi Man'idō; and finally, after taking a similar whiff, the stem is pointed forward and downward toward the earth as an offering to Nokō'mis, the grandmother of the universe, and to those who have passed before. After these preliminaries, the candidate receives at each meeting only a small amount of information, because the longer the instruction is continued during the season before the meeting at which it is hoped the candidate may be admitted the greater will be the fees; and also, in order that the instruction may be looked upon with awe and reverence, most of the information imparted is frequently a mere repetition, the ideas being clothed in ambiguous phraseology. The Midē' drum (Fig. 12 *a*) differs from the drum commonly used in dances (Fig. 12 *b*) in the fact that it is cylindrical, consisting of an elongated kettle or wooden vessel, or perhaps a section of the hollow

FIG. 12.—Ojibwa drums.

trunk of a tree about 10 inches in diameter and from 18 to 20 inches in length, over both ends of which rawhide is stretched while wet, so that upon drying the membrane becomes hard and tense, producing, when beaten, a very hard, loud tone, which may be heard at a great distance.

Frequently, however, water is put into the bottom of the drum and the drum-head stretched across the top in a wet state, which appears to intensify the sound very considerably.

The peculiar and special properties of the drum are described to the applicant; that it was at first the gift of Ki'tshi Man'idō, who gave it through the intercession of Mi'nabō'zho; that it is used to invoke the presence of the Midē' Man'idōs, or sacred spirits, when seek-

ing direction as to information desired, success, etc.; that it is to be employed at the side of the sick to assist in the expulsion or exorcism of evil man'idōs who may possess the body of the sufferer; and that it is to be used in the Midē'wigân during the initiation of new members or the advancement of a Midē' from a degree to a higher one.

The properties of the rattle are next enumerated and recounted, its origin is related, and its uses explained. It is used at the side of a patient and has even more power in the expulsion of evil demons than the drum. The rattle is also employed in some of the sacred songs as an accompaniment, to accentuate certain notes and words. There are two forms used, one consisting of a cylindrical tin box filled with grains of corn or other seeds (Fig. 13), the other being a hollow gourd also filled with seed (Fig. 14). In both of these the handle passes entirely through the rattle case.

Fig. 13. Midē' rattle.

In a similar manner the remaining gifts of Mi'nabō'zho are instanced and their properties extolled.

The mī'gis, a small white shell (Cypræa moneta L.) is next extracted from the Midē' sack, or pinji'gusân'. This is explained as being the sacred emblem of the Midē'wiwin, the reason therefor being given in the account of the several traditions presented in connection with Pls. III, IV, and VIII. This information is submitted in parts, so that the narrative of the history connected with either of the records is extended over a period of time to suit the preceptor's plans and purposes. The ceremony of shooting the mī'gis (see Fig. 15) is explained on page 192.

Fig. 14. Midē' rattle.

As time progresses the preceptor instructs his pupil in Midē' songs, i. e., he sings to him songs which form a part of his stock in trade, and which are alleged to be of service on special occasions, as when searching for medicinal plants, hunting, etc. The pupil thus acquires a comprehension of the method of preparing and reciting songs, which information is by him subsequently put to practical use in the composition and preparation of his own songs, the mnemonic characters employed being often rude copies of those observed upon the charts of his preceptor, but the arrangement thereof being original.

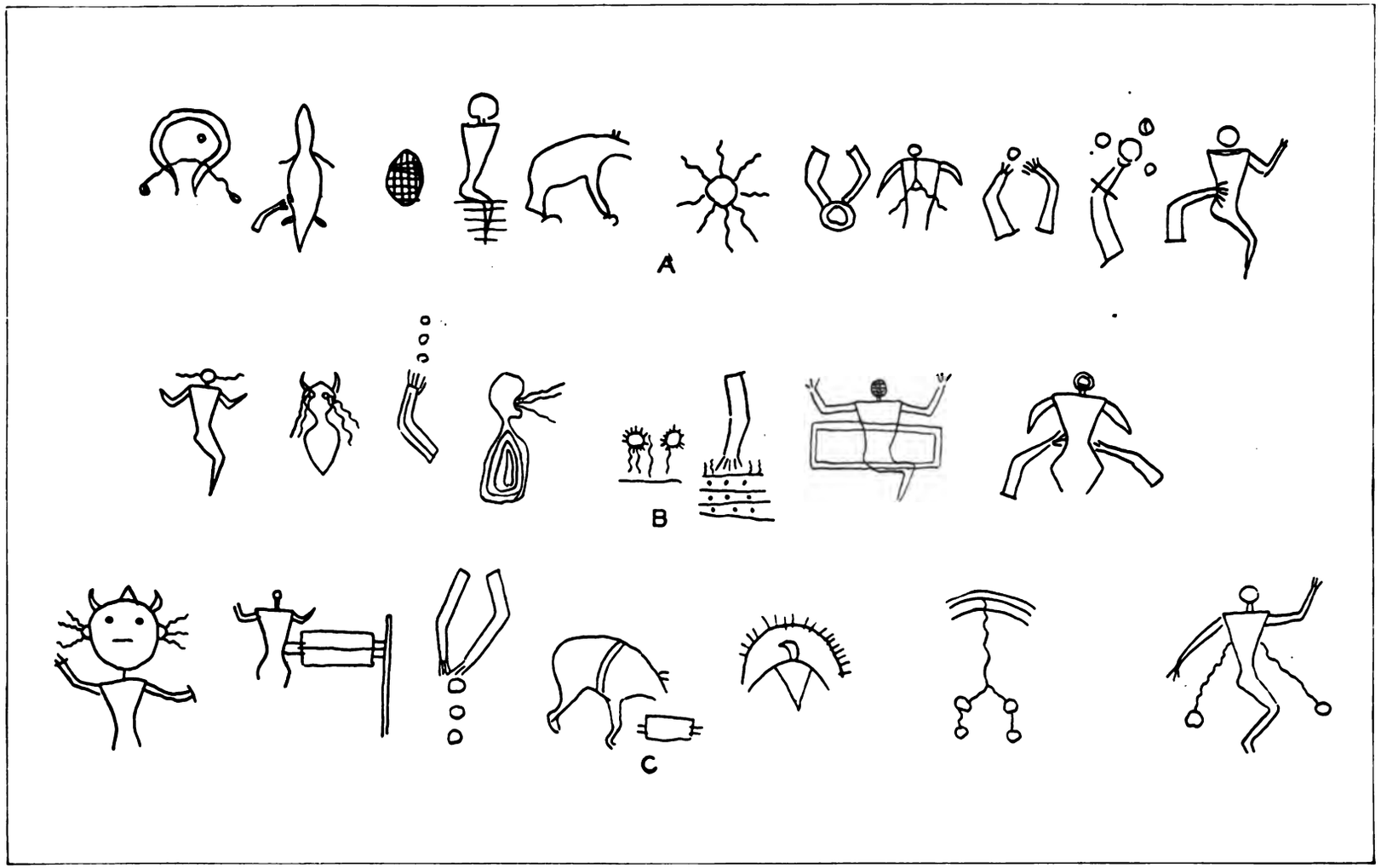
It is for this reason that a Midē' is seldom, if ever, able to recite correctly any songs but his own, although he may be fully aware of the character of the record and the particular class of service in which it may be employed. In support of this assertion several songs obtained at Red Lake and imperfectly explained by "Little Frenchman" and "Leading Feather," are reproduced in Pl. XXII, A B, page 292.

From among the various songs given by my preceptor are selected and presented herewith those recognized by him as being part of the ritual. The greater number of songs are mere repetitions of short phrases, and frequently but single words, to which are added meaningless sounds or syllables to aid in prolonging the musical tones, and repeated ad libitum in direct proportion to the degree of inspiration in which the singer imagines himself to have attained. These frequent outbursts of singing are not based upon connected mnemonic songs preserved upon birch bark, but they consist of

FIG 15.—Shooting the mi'gis.

fragments or selections of songs which have been memorized, the selections relating to the subject upon which the preceptor has been discoursing, and which undoubtedly prompts a rythmic vocal equivalent. These songs are reproduced on Pl. IX, A, B, C. The initial mnemonic characters pertaining to each word or phrase of the original text are repeated below in regular order with translations in English, together with supplemental notes explanatory of the characters employed. The musical notation is not presented, as the singing consists of a monotonous repetition of four or five notes in a minor key; furthermore, a sufficiently clear idea of this may be formed by comparing some of the Midē' songs presented in connection with the ritual of initiation and preparation of medicines.

The first of the songs given herewith (Pl. IX, A) pertains to a request to Ki'tshi Man'idō that clear weather may be had for the



MNEMONIC SONGS

day of ceremonial, and also an affirmation to the candidate that the singer's words are a faithful rendering of his creed.

Each of the phrases is repeated before advancing to the next, as often as the singer desires and in proportion to the amount of reverence and awe with which he wishes to impress his hearer. There is usually a brief interval between each of the phrases, and a longer one at the appearance of a vertical line, denoting a rest or pause. One song may occupy, therefore, from fifteen minutes to half an hour.

Ki-ne'-na-wi'-'in mani'-i-dō'-ye-win.
I rock you, you that are a spirit.
[A midē''s head, the lines denoting voice or speech—i. e., singing of sacred things, as the loops or circles at the ends of each line indicate.]

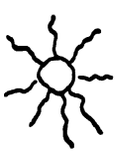
Ki-zhĭk-ki-wĭn'-da-mūn'.
The sky I tell you.
[The otter skin medicine sack, and arm reaching to procure something therefrom.]

O-we-nen', hwĭn'.
Who is it, who?
[The mī'gis shell, the sacred emblem of the Midē'wiwin.]

Wi'-dzhĭ-i-nan'.
The man helping me.
[A man walking, the Midē' Man'idō or Sacred Spirit.]

Nu-wa^{a}'-ni-ma'na nin-gulś'?
Have I told the truth to my son?
[The bear going to the Midē'wigan, and takes with him life to the Ani'shinâ'bēg.]

Rest.



Ni'-nĭn-dē', ĕ', ō', ya'.
My heart, I am there (in the fullness of my heart).
[My heart; knows all Midē' secrets, sensible one.]

A'-ni-na'-nĕsh-mi'-ĭ-an ni'-na'-wĭ-tō'.
I follow with my arms.
[Arms extended to take up "medicine" or Midē' secrets.]

Man'-i-dō'-wi-an' nĭ-me'-shine'-mi'-an.
Knowledge comes from the heart, the heart reaches to sources of "medicine" in the earth.
[A Midē' whose heart's desires and knowledge extend to the secrets of the earth. The lines diverging toward the earth denote direction.]

We'-gi-kwō' Kĕ-mĭ'-nĭ-nan'.?
From whence comes the rain?
[The power of making a clear sky, i.e., weather.]

Mi-shŏk' kwōt', dzhe-man'-i-dō'-yan.
The sky, nevertheless, may be clear, Good Spirit.
[Giving life to the sick; Dzhe Man'idō handing it to the Midē'.]

Wi'-ka-ka-nŭn'-ĕ-nan.
Very seldom I make this request of you.
[The Good Spirit filling the body of the supplicant with knowledge of secrets of the earth.]

In the following song (Pl. IX, B), the singer relates to the candidate the gratitude which he experiences for the favors derived from the Good Spirit; he has been blessed with knowledge of plants and other sacred objects taken from the ground, which knowledge has been derived by his having himself become a member of the Midē'-wiwin, and hence urges upon the candidate the great need of his also continuing in the course which he has thus far pursued.

Na-witsh'-tshi na-kŭm'-i-en a-na'-pi-a^{n}'?
When I am out of hearing, where am I?
[The lines extending from the ears denote hearing; the arms directed toward the right and left, being the gesture of negation, usually made by throwing the hands outward and away from the front of the body.]

We'-nen-ne' en'-da-yan.
In my house, I see.
[Sight is indicated by the lines extending from the eyes; the horns denote superiority of the singer.]

Mo-kī'-yan-na'-a-witsh'-i-gŭm'-mi.

When I rise it gives me life, and I take it.

[The arm reaches into the sky to receive the gifts which are handed down by the Good Spirit. The short transverse line across the forearm indicates the arch of the sky, this line being an abbreviation of the curve usually employed to designate the same idea.]

Wen'-dzhi-ba'-pi-a^{n}'.

The reason why I am happy.

[Asking the Spirit for life, which is granted. The singer's body is filled with the heart enlarged, i. e., fullness of heart, the lines from the mouth denoting abundance of voice or grateful utterances—singing.]

Rest.

Zha'-zha-bui'-ki-bi-nan' wig'-ĕ-wâm'.

The Spirit says there is plenty of "medicine" in the Midē' wig'iwam.

[Two superior spirits, Ki'tshi Man'idō and Dzhe Man'idō, whose bodies are surrounded by "lines of sacredness," tell the Midē' where the mysterious remedies are to be found. The vertical waving lines are the lines indicating these communications; the horizontal line, at the bottom, is the earth's surface.]

Ya-hō'-hon-ni'-yŏ.

The Spirit placed medicine in the ground, let us take it.

[The arm of Ki'tshi Man'idō put into the ground sacred plants, etc., indicated by the spots at different horizons in the earth. The short vertical and waving lines denote sacredness of the objects.]

Nĭ-wo'-we-ni'-nan kĭ'-bi-do-na^{n}'.

I am holding this that I bring to you.

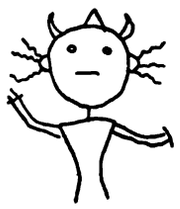
[The singer sits in the Midē'wiwin, and offers the privilege of entrance, by initiation, to the hearer.]

Midē' nĭ-ka'-năk kish'-o-wĕ'-ni-mĭ-ko'.

I have found favor in the eyes of my midē' friends.

[The Good Spirit has put life into the body of the singer, as indicated by the two mysterious arms reaching towards his body, i. e., the heart, the seat of life.]

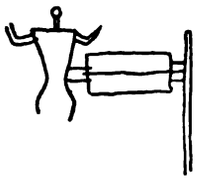
In the following song (Pl. IX, C), the preceptor appears to feel satisfied that the candidate is prepared to receive the initiation, and therefore tells him that the Midē' Man'idō announces to him the assurance. The preceptor therefore encourages his pupil with promises of the fulfillment of his highest desires.



Ba'-dzhĭ-ke'-o gi'-mand ma-bis'-in-dâ'-ā.

I hear the spirit speaking to us.

[The Midē' singer is of superior power, as designated by the horns and apex upon his head. The lines from the ears indicate hearing.]



Kwa-yăk'-in dī'-sha in-dâ'-ya[n].

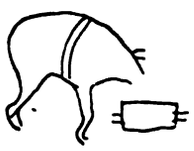
I am going into the medicine lodge.

[The Midē'wigân is shown with a line through it to signify that he is going through it, as in the initiation.]

Kwe'-tshĭ-ko-wa'-ya ti'-na-man.

I am taking (gathering) medicine to make me live.

[The discs indicate sacred objects within reach of the speaker.]



O'-wi-yo'-in en'-do-ma mâk'-kwin-ĕn'-do-ma'.

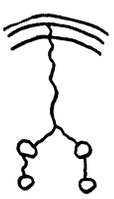
I give you medicine, and a lodge, also.

[The Midē', as the personator of Makwa' Man'idō, is empowered to offer this privilege to the candidate.]

O-wē'-nĕn bĕ-mī'-sĕt.

I am flying into my lodge..

[Represents the Thunder-Bird, a deity flying into the arch of the sky. The short lines denote the (so-called spirit lines) abode of spirits or Man'idōs.]



Na-nī'-ne kwe-wē'-an.

The Spirit has dropped medicine from the sky where we can get it.

[The line from the sky, diverging to various points, indicates that the sacred objects occur in scattered places.]

Hē'-wōg, ē', ē'.

I have the medicine in my heart.

[The singer's body—i. e., heart—is filled with knowledge relating to sacred medicines from the earth.]

MIDĒ' THERAPEUTICS.

During the period of time in which the candidate is instructed in the foregoing traditions, myths, and songs the subject of Midē' plants is a'so discussed. The information pertaining to the identification and preparation of the various vegetable substances is not imparted in regular order, only one plant or preparation, or perhaps two, being enlarged upon at a specified consultation. It may be that the candidate is taken into the woods where it is known that a specified plant or tree may be found, when a smoke offering is made before the object is pulled out of the soil, and a small pinch of tobacco put into the hole in the ground from which it was taken. This is an offering to Noko'mis—the earth, the grandmother of mankind—for the benefits which are derived from her body where they were placed by Ki'tshi Man'idō.

In the following list are presented, as far as practicable, the botanical and common names of these, there being a few instances in which the plants were not to be had, as they were foreign to that portion of Minnesota in which the investigations were made; a few of them, also, were not identified by the preceptors, as they were out of season.

It is interesting to note in this list the number of infusions and decoctions which are, from a medical and scientific standpoint, specific remedies for the complaints for which they are recommended. It is probable that the long continued intercourse between the Ojibwa and the Catholic Fathers, who were tolerably well versed in the ruder forms of medication, had much to do with improving an older and purely aboriginal form of practicing medical magic. In some of the remedies mentioned below there may appear to be philosophic reasons for their administration, but upon closer investigation it has been learned that the cure is not attributed to a regulation or restoration of functional derangement, but to the removal or even expulsion of malevolent beings—commonly designated as bad Man'idōs—supposed to have taken possession of that part of the body in which such derangement appears most conspicuous. Further reference to the mythic properties of some of the plants employed will be made at the proper time.

Although the word Mashki kiwa'bu^{n}—medicine broth—signifies liquid medical preparations, the term is usually employed in a general sense to pertain to the entire materia medica; and in addition to the alleged medscinal virtues extolled by the preceptors, certain parts of the trees and plants enumerated are eaten on account of some mythic reason, or employed in the construction or manufacture of habitations, utensils, and weapons, because of some supposed supernatural origin or property, an explanation of which they have forgotten.

Pinus strobus, L. White Pine. Zhingwâk'.

1. The leaves are crushed and applied to relieve headache; also boiled; after which they are put into a small hole in the ground and hot stones placed therein to cause a vapor to ascend, which is inhaled to cure backache.

   The fumes of the leaves heated upon a stone or a hot iron pan are inhaled to cure headache.
2. Gum; chiefly used to cover seams of birch-bark canoes. The gum is obtained by cutting a circular band of bark from the trunk, upon which it is then scraped and boiled down to proper consistence. The boiling was formerly done in clay vessels.

Pinus resinosa, Ait. Red Pine; usually, though erroneously, termed Norway Pine. Pŏkgwĕ'nagē'mŏk.

Used as the preceding.

Abies balsamea, Marshall. Balsam Fir. Ini'nandŏk.

1. The bark is scraped from the trunk and a decoction thereof is used to induce diaphoresis.
2. The gum, which is obtained from the vesicles upon the bark, and also by skimming it from the surface of the water in which the crushed bark is boiled, is carried in small vessels and taken internally as a remedy for gonorrhœa and for soreness of the chest resulting from colds.
3. Applied externally to sores and cuts.

Abies alba, Michx. White Spruce. Sĕ'ssēgân'dŏk.

The split roots—wadŏb'—are used for sewing; the wood for the inside timbers of canoes.

Abies nigra, Poir. Black Spruce. A'mikwan'dŏk.

1. The leaves and crushed bark are used to make a decoction, and sometimes taken as a substitute in the absence of pines.
2. Wood used in manufacture of spear handles.

Abies Canadensis, Michx. Hemlock. Saga'ī^{n}wu^{n}sh—"Raven Tree."

Outer bark powdered and crushed and taken internally for the cure of diarrhea. Usually mixed with other plants not named.

Larix Americana, Michx. Tamarack. Mŏsh'kīkiwa'dik.

1. Crushed leaves and bark used as Pinus strobus.
2. Gum used in mending boats.
3. Bark used for covering wig'iwams.

Cupressus thyoides, L. White Cedar. Gī'zhĭk—"Day."

1. Leaves crushed and used as Pinus strobus. The greater the variety of leaves of coniferæ the better. The spines of the leaves exert their prickly influence through the vapor upon the demons possessing the patient's body.
2. The timber in various forms is used in the construction of canoe and lodge frames, the bark being frequently employed in roofing habitations.

Juniperus Virginiana, L. Red Cedar. Muskwa'wâ'ak.

Bruised leaves and berries are used internally to remove headache.

Quercus alba, L. White Oak. Mītig'ōmish'.

1. The bark of the root and the inner bark scraped from the trunk is boiled and the decoction used internally for diarrhea.
2. Acorns eaten raw by children, and boiled or dried by adults.

Quercus rubra, L. Red Oak. Wisug'emītig'omish'—"Bitter Acorn Tree."

Has been used as a substitute for Q. alba.

Acer saccharinum, Wang. Sugar Maple. Innīnâ'tik.

1. Decoction of the inner bark is used for diarrhea.
2. The sap boiled in making sirup and sugar.
3. The wood valued for making arrow shafts.

Acer nigrum, Michx. Black Sugar Maple. Ishig'omeaush'—"Sap-flows-fast."
Arbor liquore abundans, ex quo liquor tanquam urina vehementer projicitur.
Sometimes used as the preceding.

Betula excelsa, Ait. Yellow Birch. Wī'umis'sik.
The inner bark is scraped off, mixed with that of the Acer saccharinum, and the decoction taken as a diuretic.

Betula papyracea, Ait. White Birch. Mīgwas'.
Highly esteemed, and employed for making records, canoes, syrup-pans, mōkoks'—or sugar boxes—etc. The record of the Midē'wiwin, given by Mínabō'zho, was drawn upon this kind of bark.

Populus monilifera, Ait. Cottonwood. Mâ'nâsâ'ti.
The cotton down is applied to open sores as an absorbent.

Populus balsamifera, L. Balsam Poplar. Asa'dī.
1. The bark is peeled from the branches and the gum collected and eaten.
2. Poles are used in building ordinary shelter lodges, and particularly for the Midē'wigân.

Juglans nigra, L. Black Walnut. Paga'nŏk—"Nut wood."
Walnuts are highly prized; the green rind of the unripe fruit is sometimes employed in staining or dyeing.

Smilacina racemosa, Desf. False Spikenard. Kinē'wigwŏshk—"Snake weed or Snake Vine."
1. Warm decoction of leaves used by lying-in women.
2. The roots are placed upon a red-hot stone, the patient, with a blanket thrown over his head, inhaling the fumes, to relieve headache.
3. Fresh leaves are crushed and applied to cuts to stop bleeding.

Helianthus occidentalis, Riddell. Sunflower. Pŭkite'wŭkbŏku^{n}s'.
The crushed root is applied to bruises and contusions.

Polygala senega, L. Seneca Snakeroot. Winis'sikē^{n}s'.
1. A decoction of the roots is used for colds and cough.
2. An infusion of the leaves is given for sore throat; also to destroy water-bugs that have been swallowed.

Rubus occidentalis, L. Black Raspberry. Makadē'wĭskwi'minŏk—"Black Blood Berry."
A decoction made of the crushed roots is taken to relieve pains in the stomach.

Rubus strigosus, Michx. Wild Red Raspberry. Miskwi'minŏk'—"Blood Berry."
The roots are sometimes used as a substitute for the preceding.

Gaylussacia resinosa, Torr. and Gr. Huckleberry. Mī'nŭn'.
Forms one of the chief articles of trade during the summer. The berry occupies a conspicuous place in the myth of the "Road of the Dead," referred to in connection with the "Ghost Society."

Prunus Virginiana, L. Choke Cherry. Sisa^{n}'wewi'nakâ^{n}sh'.
1. The branchlets are used for making an ordinary drink; used also during gestation.
2. The fruit is eaten.

Prunus serotina, Ehrhart. Wild Black Cherry. Okwē'wĭsh—"Scabby Bark."
1. The inner bark is applied to external sores, either by first boiling, bruising, or chewing it.
2. An infusion of the inner bark is sometimes given to relieve pains and soreness of the chest.

Prunus Pennsylvanica, L. Wild Red Cherry. Kusigwa'kumi'nŏk.
1. A decoction of the crushed root is given for pains and other stomach disorders.
2. Fruit is eaten and highly prized.
3. This, believed to be synonymous with the June Cherry of Minnesota, is referred to in the myths and ceremonies of the "Ghost Society."

Prunus Americana, Marsh. Wild Plum. Bogē'sanŏk.

The small rootlets, and the bark of the larger ones, are crushed and boiled together with the roots of the following named plants, as a remedy for diarrhea. The remaining plants were not in bloom at the time during which the investigations were made, and therefore were not identified by the preceptors, they being enabled to furnish only the names and an imperfect description. They are as follows, viz: Minē^{n}'sŏk, two species, one with red berries, the other with yellow ones; Wabō'saminĭ'sŏk—"Rabbit berries"; Shi'gwanau'isŏk, having small red berries; and Cratægus coccinea, L. Scarlet-fruited Thorn. O'ginĭk.

Typha latifolia, L. Common Cat-tail. Napŏgŭshk—"Flat grass."

The roots are crushed by pounding or chewing, and applied as a poultice to sores.

Sporobolus heterolepis Gr. Napŏ'gŭshkū^{n}s'—"Little Flat Grass."

1. Used sometimes as a substitute for the preceding
2. Roots are boiled and the decoction taken to induce emesis, "to remove bile."

Fragaria vesca, L. Wild Strawberry. Odē ĭmĭn'nĕ—Heart Berry.

Referred to in the ceremony of the "Ghost Society."

The fruit is highly valued as a luxury.

Acer Pennsylvanicum, L. Striped Maple. Mō^{n}'zomĭsh'—"Moose Wood."

The inner bark scraped from four sticks or branches, each two feet long, is put into a cloth and boiled, the liquid which can subsequently be pressed out of the bag is swallowed, to act as an emetic.

Fraxinus sambucifolia, Lam. Black or Water Ash. A'gimak'.

1. The inner bark is soaked in warm water, and the liquid applied to sore eyes.
2. The wood is employed in making the rims for frames of snow-shoes.

Veronica Virginica, L. Culver's Root. Wĭ'sŏgedzhi'wĭk—"Bitter Root."

A decoction of the crushed root is taken as a purgative.

Salix candida, Willd. Hoary Willow. Sisi'gewe'mĭsh.

The thick inner bark of the roots is scraped off, boiled, and the decoction taken for cough.

Symphoricarpus vulgaris, Michx. Indian Currant. Gus'sigwaka'mĭsh.

The inner bark of the root boiled and the decoction, when cold, applied to sore eyes.

Geum strictum, Ait. Aven. Ne'bone'ankwe'âk—"Hair on one side."

The roots are boiled and a weak decoction taken internally for soreness in the chest, and cough.

Rumex crispus, L. Curled Dock. O'zabetshi'wĭk.

The roots are bruised or crushed and applied to abrasions, sores, etc.

Amorpha canescens, Nutt. Lead Plant. We'abŏnag'kak—"That which turns white."

A decoction, made of the roots, is used for pains in the stomach.

Rosa blanda, Ait. Early Wild Rose. O'ginĭk.

A piece of root placed in lukewarm water, after which the liquid is applied to inflamed eyes.

Anemone (*sp. ?*) Anemone. Wisŏg'ibŏk'; also called Hartshorn plant by the mixed-bloods of Minnesota.

The dry leaves are powdered and used as an errhine, for the cure of headache.

(*Gen. et sp. ?*) Termed Kine'bĭk wa^{n}sh'ko^{n}s and "Snake weed."

This plant was unfortunately so injured in transportation that identification was impossible. Ball-players and hunters use it to give them endurance and speed; the root is chewed when necessary to possess these qualities. The root is likened to a snake, which is supposed to be swift in motion and possessed of extraordinary muscular strength.

Rhus (*aromatica*, Ait. ?) "White Sumac." Bŏkkwan'ĭbŏk.

Roots are boiled, with those of the following named plant, and the decoction taken to cure diarrhea.

(*Gen. et sp. ?*) Ki'tshiodēiminibŏk—"Big Heart Leaf."

Roots boiled, with preceding, and decoction taken for diarrhea.

Monarda fistulosa, L. Wild Bergamot. Moshkŏs'wa^{n}owi^{n}s'—"Little Elk's Tail."

The root is used by making a decoction and drinking several swallows, at intervals, for pain in the stomach and intestines.

Hydrophyllum Virginicum, L. Waterleaf. Hu^{n}kite'wagūŭs'.

The roots are boiled, the liquor then taken for pains in the chest, back, etc.

Anemone Pennsylvanicum, L. Pennsylvania Anemone. Pesĭ'kwadzhi'bwiko'kŏk.

A decoction of the roots is used for pains in the lumbar region.

Viola (*Canadensis*, L. ?). Canada Violet. Maskwĭ'widzhĭ'wiko'kŏk.

The decoction made of the roots is used for pains in the region of the bladder.

Phryma leptostachya, L. Lopseed. Waia'bishkĕno'kŏk.

The roots are boiled and the decoction taken for rheumatic pains in the legs.

Viola pubescens, Ait. Downy Yellow Violet, Ogitē'wagu^{n}s.

A decoction is made of the roots, of which small doses are taken at intervals for sore throat.

Rosa (*lucida*, Ehrhart ?). Dwarf Wild Rose. Oginĭ'minaga^{n}'mŏs.

The roots of young plants are steeped in hot water and the liquid applied to sore eyes.

(*Gen. et sp. ?*) Mŏ'zânâ'tĭk.

This plant could not be identified at the locality and time at which investigations were conducted. The root is boiled and the decoction taken as a diuretic for difficult micturition.

Actæa rubra, Michx. Red Baneberry. Odzĭ'bĭkĕ^{n}s'—"Little Root."

A decoction of the root, which has a sweet taste, is used for stomachic pains caused by having swallowed hair (mythic). Used also in conjunction with Ginseng.

This plant, according to some peculiarities, is considered the male plant at certain seasons of the year, and is given only to men and boys, while the same plant at other seasons, because of size, color of fruit, or something else, is termed the female, and is prepared for women and girls in the following manner, viz: The roots are rolled in basswood leaves and baked, when they become black; an infusion is then prepared, and used in a similar manner as above.

The latter is called Wash'kubĭdzhi'bikakŏk'.

Botrychium Virginicum, Swartz. Moonwort. Ozaga'tigŭm.

The root is bruised and applied to cuts.

Aralia trifolia, Gr. Dwarf Ginseng. Nesō'wakŏk—"Three Leafed."

The roots are chewed and the mass applied to cuts to arrest hemorrhage.

Echinospermum lappula, Lehm. Stickweed. Ozaga'tĭgomĕ^{n}s—"Burr Bush."

The roots are placed in a hole in the ground upon hot stones, to cause the fumes to rise, when the patient puts down his face and has a cloth or blanket thrown over his head. The fumes are inhaled for headache. The raw roots are also sniffed at for the same purpose.

It is affirmed by various members of the Midē' Society that in former times much of the information relating to some of these plants was not imparted to a candidate for initiation into the first degree, but was reserved for succeeding degrees, to induce a Midē' of the first degree to endeavor to attain higher distinction and further advancement in the mysteries of the order. As much knowl-

edge is believed to have been lost through the reticence and obstinacy of former chief priests, the so-called higher secrets are now imparted at the first and second degree preparatory instructions. The third and fourth degrees are very rarely conferred, chiefly because the necessary presents and fees are beyond the reach of those who so desire advancement, and partly also because the missionaries, and in many instances the Indian agents, have done their utmost to suppress the ceremonies, because they were a direct opposition and hindrance to progress in Christianizing influences.

When the preparatory instruction has come to an end and the day of the ceremony of initiation is at hand, the preceptor sings to his pupil a song, expatiating upon his own efforts and the high virtue of the knowledge imparted. The pipe is brought forward and an offering of tobacco smoke made by both preceptor and pupil, after which the former sings a song (Pl. x, A.), the time of its utterance being tediously prolonged. The mnemonic characters were drawn by Sikas'sigĕ, and are a copy of an old birch-bark scroll which has for many years been in his possession, and which was made in imitation of one in the possession of his father, Baiē'dzĭk, one of the leading Midē' at Mille Lacs, Minnesota.

Wĭ'-ka-no'-shi-a^{n}-ŏ.

My arm is almost pulled out from digging medicine. It is full of medicine.

[The short sigzag lines signifying magic influence, erroneously designated "medicine."]

We-wĭ'-ka-nĭ'-an.

Almost crying because the medicine is lost.

[The lines extending downward from the eye signifies weeping; the circle beneath the figure is the place where the "medicine" is supposed to exist. The idea of "lost" signifies that some information has been forgotton through death of those who possessed it.]

Me-shi'-âk-kĭnk mi-suĭ'-a-kĭnk.

Yes, there is much medicine you may cry for.

[Refers to that which is yet to be learned of.]

Pe-i'-e-mĭ-ko-ya'-na-kĭnk'.

Yes, I see there is plenty of it.

[The Midē' has knowledge of more than he has imparted, but reserves that knowledge for a future time. The lines of "sight" run to various medicines which he perceives or knows of.]

Rest.

We'-a-kwĕ'-nĭnk pe-ĭ-e'-mi-wĭt'-o-wan'.

When I come out the sky becomes clear.

[When the otter-skin Midē' sack is produced the sky becomes clear, so that the ceremonies may proceed.]

We'-kwĕ-nĭnk' ke'-tŏ-nĭnk' e'-to-wa'.

The spirit has given me power to see.

[The Midē' sits on a mountain the better to commune with the Good Spirit.]

Mĭ'-sha-kwat'-ni-yō'.

I brought the medicine to bring life.

[The Midē' Man'idō, the Thunderer, after bringing some of the plants—by causing the rains to fall—returns to the sky. The short line represents part of the circular line usually employed to designate the imaginary vault of the sky.]

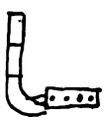
Me'-ka-yē'-nĭnk te'-a-yĕ-am'-ban.

I, too, see how much there is.

[His power elevates the Midē' to the rank of a man'idō, from which point he perceives many secrets hidden in the earth.]

In-de'-be-mĭ'-ko.

I am going to the medicine lodge.



[The vertical left-hand figure denotes a leg going toward the Midē'wigân.]

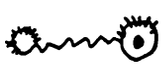
'In-de'-bi-bi'-to^{n}.

I take life from the sky.

[The Midē' is enabled to reach into the sky and to obtain from Ki'tshi Man'idō the means of prolonging life. The circle at the top denotes the sacred mĭ'gis, or shell.]

No-a'-wi'-mi-kō'.

Let us talk to one another.



[The circles denote the places of the speaker (Midē') and the hearer (Ki'tshi Man'idō), the short lines signifying magic influences, the Midē' occupying the left hand and smaller seat.]

Man'-i-dō-ye-na'-ni ni-kan'.

The spirit is in my body, my friend.

[The mĭ'gis, given by Ki'tshi Man'idō, is in contact with the Midē''s body, and he is possessed of life and power.]

From ten days to two weeks before the day of initiation, the chief Midē' priest sends out to all the members invitations, which consist of sticks one-fourth of an inch thick and 6 or 7 inches long. The courier is charged with giving to the person invited explicit information as to the day of the ceremony and the locality where it is to

be held. Sometimes these sticks have bands of color painted around one end, usually green, sometimes red, though both colors may be employed, the two ends being thus tinted. The person invited is obliged to bring with him his invitation stick, and upon entering the Midē'wigân he lays it upon the ground near the sacred stone, on the side toward the degree post. In case a Midē' is unable to attend he sends his invitation with a statement of the reason of his inability to come. The number of sticks upon the floor are counted, on the morning of the day of initiation, and the number of those present to attend the ceremonies is known before the initiation begins.

About five or six days preceding the day set for the ceremony of initiation, the candidate removes to the neighborhood of the locality of the Midē'wigân. On the evening of the fifth day he repairs to the sudatory or sweat-lodge, which has, in the mean time, been built east of the sacred inclosure, and when seated within he is supplied with water which he keeps for making vapor by pouring it upon heated stones introduced for the purpose by assistants upon the outside. This act of purification is absolutely necessary and must be performed once each day for four days, though the process may be shortened by taking two vapor baths in one day, thus limiting the process to two days. This, however, is permitted, or desired only under extraordinary circumstances. During the process of purgation, the candidates thoughts must dwell upon the seriousness of the course he is pursuing and the sacred character of the new life he is about to assume.

When the fumigation has ceased he is visited by the preceptor and the other officiating Midē' priests, when the conversation is confined chiefly to the candidate's progress. He then gives to each of them presents of tobacco, and after an offering to Ki'tshi Man'idō, with the pipe, they expose the articles contained in their Midē' sacks and explain and expatiate upon the merits and properties of each of the magic objects. The candidate for the first time learns of the manner of preparing effigies, etc., with which to present to the incredulous ocular demonstration of the genuineness and divine origin of the Midē'wiwin, or, as it is in this connection termed, religion.

Several methods are employed for the purpose, and the greater the power of the Midē' the greater will appear the mystery connected with the exhibition. This may be performed whenever circumstances demand such proof, but the tests are made before the candidate with a twofold purpose: first, to impress him with the supernatural powers of the Midē' themselves; and second, in an oracular manner, to ascertain if Ki'tshi Ma'nidō is pleased with the contemplated ceremony and the initiation of the candidate.

The first test is made by laying upon the floor of the wig'iwam a string of four wooden beads each measuring about 1 inch in diameter. See Fig. 16. After the owner of this object has chanted for a few moments in an almost inaudible manner the beads begin to roll from side to side as if animated. The string is then quickly restored to its place in the Midē' sack. Another Midē' produces a small wooden effigy of a man (Fig. 17), measuring about 5 inches in height. The body has a small orifice running through it from between the shoulders to the buttocks, the head and neck forming a separate piece which may be attached to the body like a glass stopper to a bottle.

FIG. 16.

A hole is made in the ground deep enough to reach to the hips of

FIG. 17.

FIG. 18.

the effigy, when the latter is put into it and the loose earth loosely restored so as to hold it in an upright position. Some magic powder of herbs is sprinkled around the body, and into the vertical orifice in

it, when the head is put in place. A series of inarticulate utterances are chanted, when, if everything be favorable, the figure will perceptibly move up and down as if possessed of life. Fig. 18 represents another figure used in a similar manner. It consists of one piece, however, and is decorated with narrow bands of dark blue flannel about the ankles and knees, a patch of red cloth upon the breast and bands about the wrists, each of the eyes being indicated by three white porcelain beads.

One of the most astonishing tests, however, and one that can be produced only by Midē' of the highest power, consists in causing a Midē' sack to move upon the ground as if it were alive. This, it is confidently alleged, has been done repeatedly, though it is evident that the deception is more easily produced than in the above-mentioned instances, as the temporary retention within a bag of a small mammal could readily be made to account for the movements.

In most of these private exhibitions the light is so obscured as to prevent the deception being observed and exposed; and when public demonstrations of skill are made the auditors invariably consist of the most credulous of the uninitiated, or the confréres of the performer, from whom no antagonism or doubt would be expected.

The preceptor then consults with the Midē' priests respecting the presents to be delivered by the candidate, and repeats the following words, viz:

Mis-shai'-ĕ-gwa tshi-dĕ-bŏg-in-de-mung'. gi'-she-gŏ-dung' ka-mi'-nĕ-
Now is the time that we shall fix the price of everything pertaining to the sky, that has been
nŏngk gi'-she-got-dŭng' di'-bi-ga-dōnk' gai-yé'. A-pē'-gĕ-dá'wŭnk
given to us from the day [and] the night also. When it shall come to pass
i'-wa-pī ge-bin'-de-ga-yŏngk', ă-au'-wa-mi-dē'-wĭd.
and at the time that we shall enter, he who wishes to become a Midē'.

When the four vapor baths have been taken by the candidate, and the eve of the ceremony has arrived, he remains in the sudatory longer than usual so as not to come in contact with the large crowd of visitors who have arrived upon the scene. The woods resound with the noises incident to a large camp, while in various directions may be heard the monotonous beating of the drum indicating the presence of a number of dancers, or the hard, sharp taps of the midē' drum, caused by a priest propitiating and invoking the presence and favor of Ki'tshi Ma'nidō in the service now so near at hand.

When the night is far advanced and all becomes hushed, the candidate, with only the preceptor accompanying, retires to his own wig'iwam, while the assistant Midē' priests and intimate friends or members of his family collect the numerous presents and suspend them from the transverse and longitudinal poles in the upper part of the Midē'wigân. Watchers remain to see that nothing is removed during the night.

At the approach of day, the candidate breakfasts and again returns to the sweat-lodge to await the coming of his preceptor, and, later, of the officiating priests. The candidate puts on his best cloth-

ing and such articles of beaded ornaments as he may possess. The preceptor and Midē′ priests are also clad in their finest apparel, each wearing one or two beaded dancing bags at his side, secured by a band of beaded cloth crossing the opposite shoulder. The members of the Midē′wiwin who are not directly concerned in the preliminaries resort to the Midē′wigân and take seats around the interior, near the wall, where they may continue to smoke, or may occasionally drum and sing. The drummer, with his assistants, takes a place near upon the floor of the sacred inclosure to the left of the eastern entrance, i. e., the southeast corner.

IMPLORATION FOR CLEAR WEATHER.

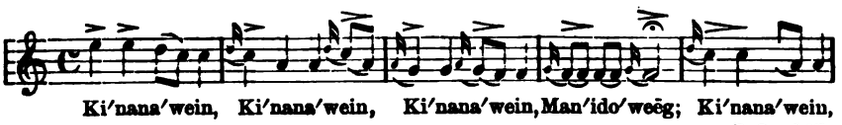
Should the day open up with a threatening sky, one of the Midē′ priests accompanying the candidate sings the following song (Pl. x B) to dispel the clouds. Each of the lines is repeated an indefinite number of times, and after being repeated once or twice is sung also by the others as an accompaniment.

It will be observed that the words as spoken vary to some extent when chanted or sung.

Hi-na-nē′, hē′, ki′-ne-na-wē′ man′-i-dō.

I swing the spirit like a child.

[The Midē′ Spirit, showing magic lines radiating from his body. The Midē′ claims to be able to receive special favor.]



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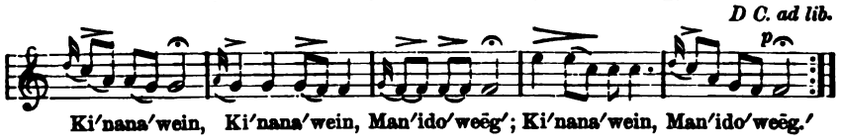
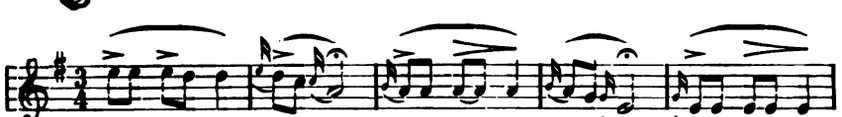


Gi-zhik′-ē′ ka-hwē′ da-mū′-nĕ.

The sky is what I am telling you about.

[The sky and the earth united by a pathway of possible rain.]



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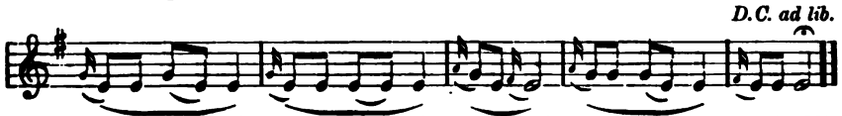
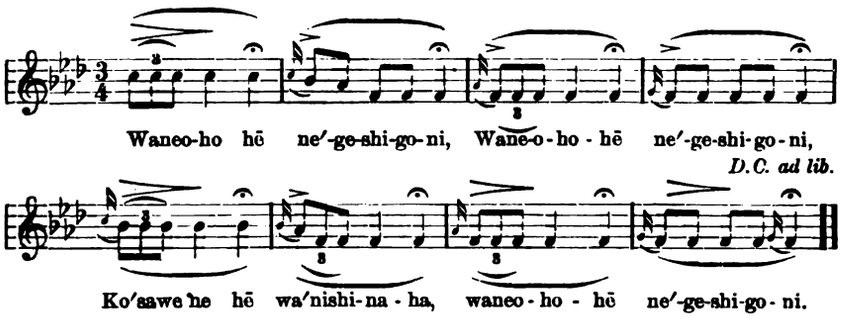
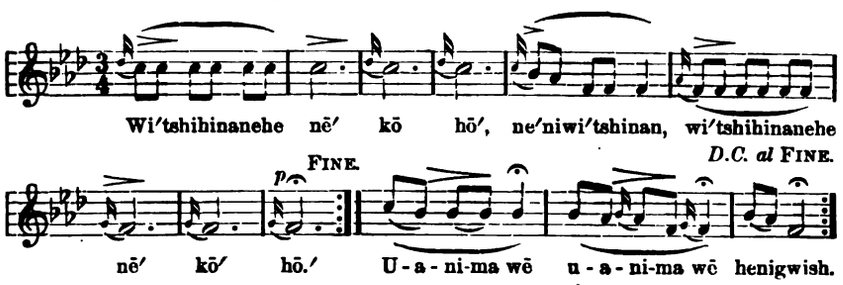


Wa-ne-o-ho ne'-ge-shi'-go-ni
Ko-sa'-we, hē', wa-ni'-sha'-na'.
We have lost the sky [it becomes dark].
[Clouds obscure the sky, and the arm of the Midē' is reaching up into it for its favor of clear weather.]



Wi-tshi'-hi-na'-ne-he, nē', kō', hō'.
ne'-ni-wi-tshi-nan'.
I am helping you.
[The Otter-skin Midē' sack is held up to influence the Otter Spirit to aid them.]



U-a'-ni-mā', wē', he'-ni-gwish.
I have made an error [in sending].
[The Otter-skin Midē' sack has failed to produce the desired effect.]

Rest.

The Midē' women who have gathered without the lodge now begin to dance as the song is renewed.

Na-nin-dē', hē', he-yo-ya, nē'.
I am using my heart.
[Refers to sincerity of motives in practice of Midē' ceremony.]

Yo′-na-hĭsh′-i-me′-a′-ne′, hē′.
yá-na-hĭsh-a-me′-a-ne′, hē′.
What are you saying to me, and I am "in my senses"?

Man′-i-dō, hē′ nē′, me′-de-wē′, ē′.
The spirit wolf.
[One of the malevolent spirits who is opposed to having the ceremony is assisting the evil man′idōs in causing the sky to be overcast.]

Wen′-tshi-o-ne-se hē′, nē′, wen′-tshi-o-ne-se hē′.
I do not know where I am going.
[The Midē′ is in doubt whether to proceed or not in the performance of initiation.]

Mi′-shok-kwo′-ti-ne be-wa′-ne,
ni-bin′-zhi man′-i-dō i-ya′-nē.
I depend on the clear sky.
[To have the ceremony go on. Arm reaching toward the sky for help.]

Ke-me′-ni-na-ne′ a-nō′-ē′
a′-sho-wē′ me-nō′-de ki-man′-i-dō.
I give you the other village, spirit that you are.
[That rain should fall anywhere but upon the assemblage and Midē′wigân.]

Tshing-gwē′-o-dē |: gē′.
The thunder is heavy.
[The Thunder Bird, who causes the rain.]

We′-ka-ka-nō′, hō′ shi′-a-dē′.
We are talking to one another.
[The Midē′ communes with Ki′tshi Man′idō; he is shown near the sky; his horns denoting superior wisdom and power, while the lines from the mouth signify speech.]

In case the appearance of the sky becomes sufficiently favorable the initiation begins, but if it should continue to be more unfavorable or to rain, then the song termed the "Rain Song" is resorted to and sung within the inclosure of the Midē′wigân, to which they all march in solemn procession. Those Midē′ priests who have with them their Midē′ drums use them as an accompaniment to the singing and to propitiate the good will of Ki′tshi Man′idō. Each line of the entire song appears as an independent song, the intervals of rest varying in time according to the feelings of the officiating priest.

The words of the song are known to most of the Midē′ priests; but, as there is no method of retaining a set form of musicial notation, the result is entirely individual and may vary with each singer, if sung independently and out of hearing of others; so that, under

ordinary circumstances, the priest who leads off sings through one stanza of the song, after which the others will readily catch the notes and accompany him. It will be observed, also, that the words as spoken vary to some extent when chanted or sung.

If this song does not appear to bring about a favorable change the priests return to their respective wig'iwams and the crowd of visitors disperses to return upon the first clear day.

INITIATION OF CANDIDATE.

If, however, the day be clear and promising the candidate goes early to the sweat-lodge, where he is joined by his preceptor, and later by the officiating priest. After all preliminaries have been arranged and the proper time for regular proceedings has arrived, the preceptor sings the following song (Pl. x, C), the musical notation of which varies according to his feelings, clearly showing that there is no recognized method of vocal delivery, as is the case with the music of dancing songs:

Kan-do'-e-a-nē',
to'-e-a-nē' kan-do'-e-a-nē',
in-nin'-nĭ man'-e-dō'-ē'.
The spirit man is crying out.

[The head of the Midē', a synonym of Ki'tshi Man'idō. The voice lines show spots denoting intensity of accentuation, and that Ki'tshi Man'idō is pleased to look with favor upon the proceedings.]

Ya-ni-nē', nā', tshi-mo-tē', hē',
Talking around in various sections.

[The voice lines, as in the preceding figure, extending downward from the mouth to either side, have spots upon them to indicate "talks" in various directions addressed to the Midē'.]

Man'-e-dō, wē', hē', pe-me'-so-wā'.
The spirit is flying.

[The Thunder Bird, who causes the rain, is away at some remote place.]

Mi-de'-we-tē-we' me'-wa-gwi'-shak-wa',
mi-de'-we-ta'.
The day is clear; let us have the grand medicine.

[The Midē''s hand reaches to the sky, and rain falls at places other than upon the Midē'wigân, as shown by rain lines from the end of the curved lines denoting the sky.]

Me-shak'-kwot dung'-ke-hē'
ne-mē'-gĭs-sĭm'.
I am the sign that the day will be clear.

[The Midē''s hand reaches to the sky, as indicated by the short transverse line, and the sun's rays diverge in all directions.]

Sun′-gis-ni de′-wit-ka-nē′, hē′,
wi-no′-wo-he′-she-wat′ man′-i-dō-wi-tshik.
I am the strongest medicine, is what is said of me.

[The speaker compares himself to Makwa′ Man′idō, the Bear Spirit.]

Hwo′-ba-mī′-de, hwo′-ba-mī′-de, man-ĕ-dō
na′-wa-gī′-zhĭk.
The spirit in the middle of the sky sees me.

[The upper spot denotes the abode of Ki′tshi Man′idō, the "line of vision" extending to the speaker, shown at a corresponding spot below.]

Ni-wĭ-we′-wai-a-de′ hi′-me nai′-o-nā′.
I take my sack and touch him.

[The Midē′ will use his sacred Otter-skin sack to touch the candidate.]

Man′-i-dō wi-kan-ē′, mi-de′-yo.
My medicine is the sacred spirit.

[The Midē′ professes to have received the divine gift from Ki′tshi Man′idō; the gifts are seen descending to the hand held up to receive them.]

Ha-ni-ne′ ku-mē′ ni′-kan-nē′?
How do you answer me, my Midē′ friends?

[This is addressed to the Midē′ priests (Nika′ni) present, and is an inquiry as to their willingness to proceed. The Midē′wigân is shown, the line running horizontally through it the path of the candidate (or one who has gone through), the two spots within the place of the sacred stone and the post, while the spot to the right of the outside of the inclosure denotes the beginning, or the sweat-lodge, symbolizing the circle of the earth upon the Midē′ chart (Pl. III), those upon the left denoting the three possible degrees of advancement in the future.]

Upon the conclusion of the song there is a brief interval, during which all partake of a smoke in perfect silence, making the usual offerings to the four points of the compass, to Ki′tshi Man′idō′, and toward the earth.

The preceptor then says:

Mĭs-sa′i′-a-shi-gwa,	mĭs-sa′-a-shĭ′-gwa-	nŏn′-do-nŭng;	ka-kĭn-nâ
Now is the time,	now is the time he	hears us;	all of us
ka-kĭn′-nâ-gi-nŏn′-do-da′g-u-nan′		ga-o′-shī-dōt	mi-dē′-wĭ′-win.
he hears us all the one		who made the	midē′wiwin.

After this monologue he continues, and addresses to the candidate the midē′ gagĭ′kwewĭn′, or Midē′ sermon, in the following language, viz:

An-be′-bi-sĭn′-di-wi′-shĭn,	wa′-i-ni′-nan;	kēsh′-pin-pe′-sin-da′-nin-wĭn
now listen to me	what I am about to say to you;	If you take heed of that which I say to you

da-ma'-dzhi shka' ke'-bi-mâ'-di-si-wĭn'. Un, nun'-gŭm, ke-za'-ki-gi-zi'-to^n mŏn
shall continue always your life. Now, to-day I make known to you
ki'-tshi man'-i-dō ō'-dik-kid'-do-wĭn'; o'-wi-dŏsh kid'-di-nĭn' ki-ĭ'-kid-dō'ki'-tshi
the great spirit That which he says; and now this I say to you. This is what says
man'-i-dō gi'-sa-gi-ĭg'. to-wa'-bish-ga' gi-shtig'-wa a-pĭ'-we-
the great spirit that he loves you. It shall be white the sacred object at the time
sa'-gi-sit'-to-wad o-sa'-in-di-kid'-do-wĭn ĕ'-kid-dōdt ki'-tshi man'-i-dō ō'-gi-
When they shall let it be known and this is what I say That which he says the great spirit now this
din'-nĭn mis-sâ'-wa ke'-a-ked'-de-wó wa'-ba-ma-tshin'ni-bŭdt
I impart to you even if they say That they saw him dead
mi'-â-ma' tshi'-ō- nish-gâd', mi-â-má a-pe'-ni-nut' nin-dē' kid'-do-wĭn
in this he shall be place. Raised again, in this place he puts his trust. In my heart in this "saying"
min-nik' kid-da'- kĭ-o-wink'. Ka-wĭ'-ka-da-an'-na-we'-was-si-nan,
the time of the duration Of the world. It shall never fail.
me-ē'-kid-dodt' man'-i-dō. Nin'-ne-dzha'-nis ke-un'-dzhi be-mâ'-dis si'-an.
That is what he says, the spirit. My child, this shall give you life.

The Midē' priests then leave the sweat-lodge and stand upon the outside, while the candidate gathers up in his arms a number of small presents, such as tobacco, handkerchiefs, etc., and goes out of the wig'iwam to join the Midē' priests. The order of marching to the main entrance of the Midē'wigân is then taken up in the following order: First the candidate, next the preceptor, who in turn is followed by the officiating priests, and such others, and members of his family and relatives as desire. At the door of the Midē'wigân all but one of the priests continue forward and take their stations within the inclosure, the preceptor remaining on one side of the candidate, the Midē' priest upon the other, then all march four times around the outside of the inclosure, toward the left or south, during which time drumming is continued within. Upon the completion of the fourth circuit the candidate is placed so as to face the main entrance of the Midē'wigân. When he is prompted to say:

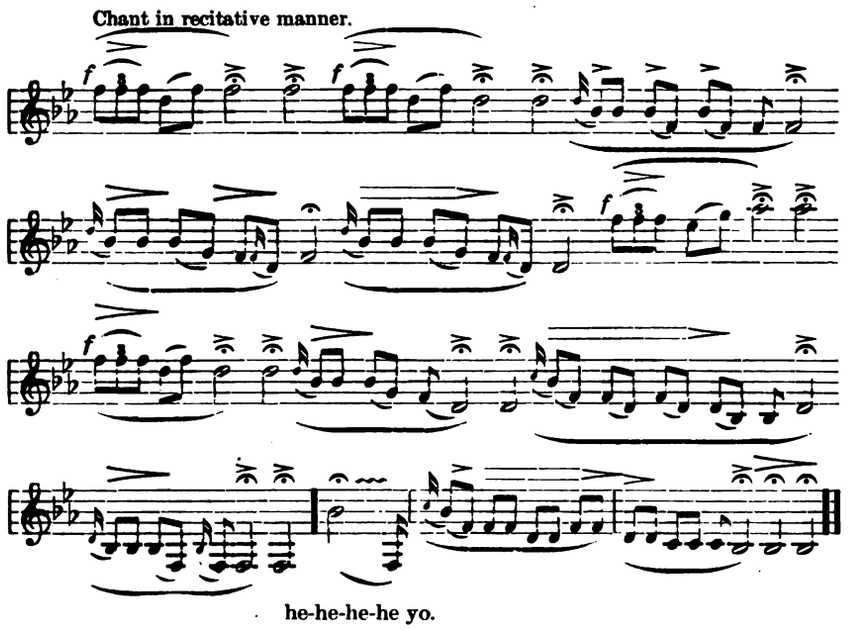
"Man- un'-ga-bin'-di-gĕ o-bŏg'-ga-dĭ-nan', o-dai'-ye-din'."
Let me come in and these I put down my things [gifts].

The presents are then laid upon the ground. The preceptor goes inside, taking with him the gifts deposited by the candidate, and remains standing just within the door and faces the degree post toward the west. Then the chief officiating priest, who has remained at the side of the candidate, turns toward the latter and in a clear, distinct, and exceedingly impressive manner sings the following chant, addressed to Ki'tshi Man'idō whose invisible form is supposed to abide within the Midē'wigân during such ceremonies, stating that the candidate is presented to receive life (the mī'gis) for which he is suffering, and invoking the divine favor.

Haí ya ha man'-i-dō, hō', ti-bish'-ko-gish'-i-gŭng, hē', we-zá-ba-mid'-mi
There is a spirit ho, just as the one above, he, now sits with me
ni^n-dzhá-nis, esh-i-gan'-do-we, hē', hwē', mé-a-tshi-bin'-de-gan'-ni-nan, nōs,
my child and now I proclaim, he, hwe, that I enter you here my father

dzhi-man'-i-dō, hō', hwō', sha-wé-nĭ-mi-shin', hē', hwē', a-shig'-wa-bin'-de-gan-nŏk
good spirit, ho, hwo, have pity on me, he, hwe now that I enter him here,
gé-gwa-da-gí-sid wi-lĭ-mâ'-di-sĭd, dé-bwe-daú-wi-shĭn dzhí-bi-mâ'-di-sĭd', nōs,
he that is suffering for life, believe me that he shall live, my father,
wē'-o-sĭm'-in-nan', hē', hē'.
whose child I am, he, he.

The following is the musical notation:



The candidate is then led within the inclosure when all the members of the society arise while he is slowly led around toward the southern side to the extreme end in the west, thence toward the right and back along the western side to the point of beginning. This is done four times. As he starts upon his march, the member nearest the door falls in the line of procession, each member continuing to drop in, at the rear, until the entire assembly is in motion. During this movement there is a monotonous drumming upon the Midē' drums and the chief officiating priest sings:

Nĭ'-sha-bōn'-da shkan wig'-i-wam ke-nōn'-dēg,
I go through [the] "house" the long, i. e., through the Midē'wigân.

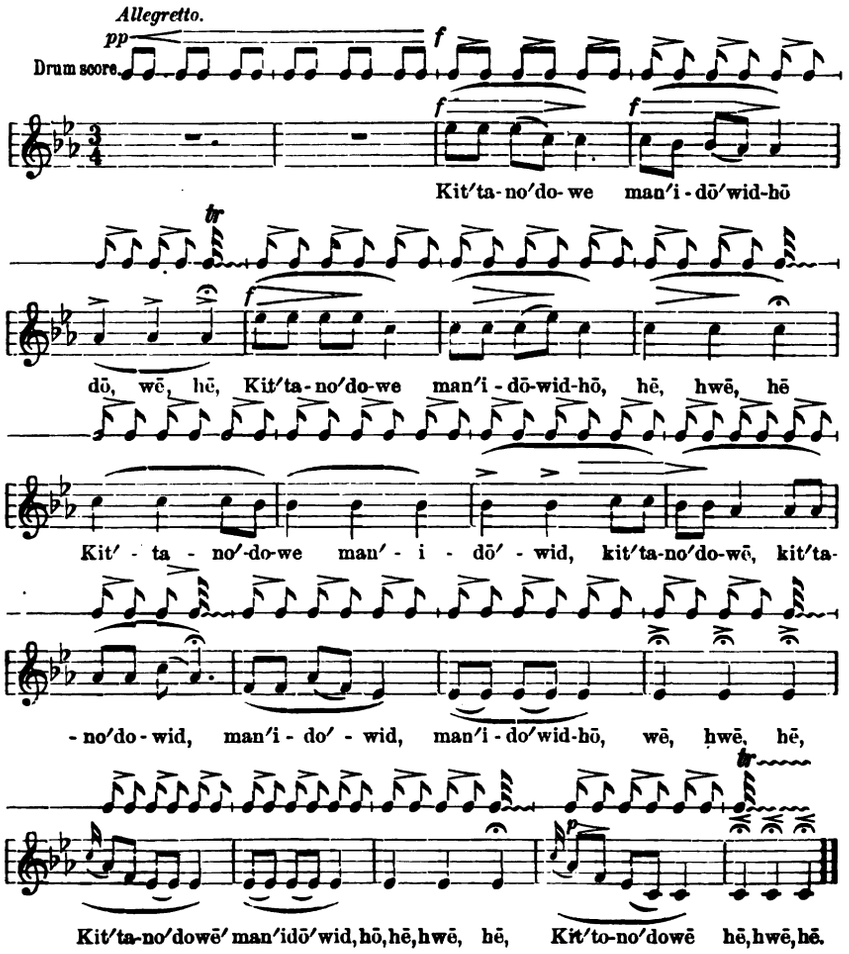
At the fourth circuit, members begin to stop at the places previously occupied by them, the candidate going and remaining with his preceptor to a point just inside the eastern entrance, while the four officiating priests continue around toward the opposite end of the inclosure and station themselves in a semicircle just beyond the degree post, and facing the western door. Upon the ground before them are spread blankets and similar goods, which have been removed from the beams above, and upon which the candidate is to kneel.

He is then led to the western extremity of the inclosure where he

stands upon the blankets spread upon the ground and faces the four Midē' priests. The preceptor takes his position behind and a little to one side of the candidate, another assistant being called upon by the preceptor to occupy a corresponding position upon the other side. During this procedure there is gentle drumming which ceases after all have been properly stationed, when the preceptor steps to a point to the side and front of the candidate and nearer the officiating priests, and says:

Mi-i'-shi-gwa' bŏ'-gi-ta-mo^{n}'-nan, mi'-na-nan'-kĕ-ân-dzhi bi-mâ'-dĭ-si'-an.
The time has arrived that I yield it to you, [the midē'migis] that will give you life.

The preceptor then returns to his position back of and a little to one side of the candidate, when the chief officiating priest sings the following song, accompanying himself upon a small cylindrical midē' drum. The words are: Kit'-ta-no^{n}'-do-wē man'-i-do'-wid—you shall hear me, spirit that you are—, and the music is rendered as follows:



After this song is ended the drum is handed to one of the members sitting near by, when the fourth and last of the officiating priests says to the candidate, who is now placed upon his knees:

Mis-sa'-a-shi'-gwa ki-bo'-gis-sē-na-min tshi'-ma-mâd bi-mâ'-di-sĭ-wĭn, mĭ-nē'-sĭd.
Now is the time that I hope of you that you shall take life the bead [mī'gis shell.]

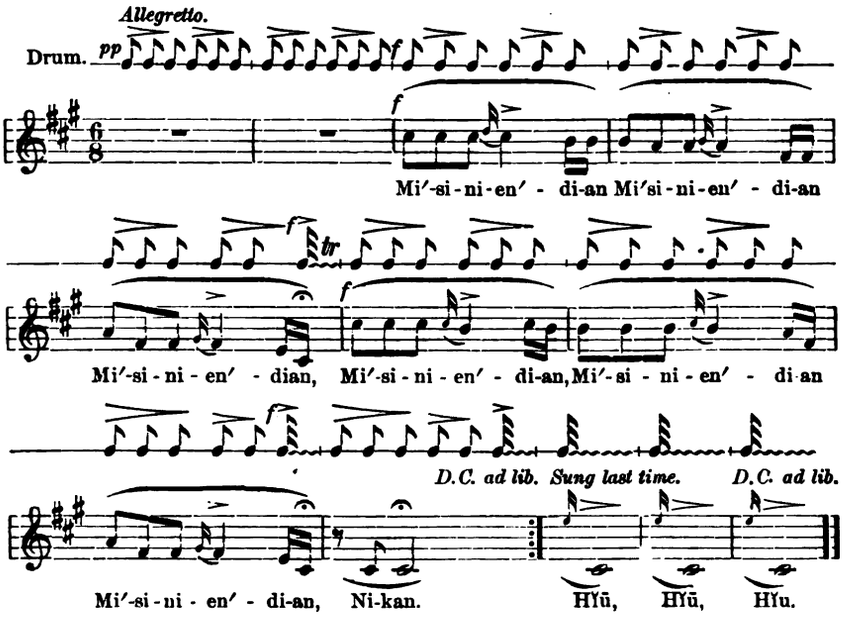
This priest then grasps his Midē' sack as if holding a gun, and, clutching it near the top with the left hand extended, while with the right he clutches it below the middle or near the base, he aims it toward the candidate's left breast and makes a thrust forward toward that target uttering the syllables " yâ, hŏ', hŏ', hŏ', hŏ', hŏ'," rapidly, rising to a higher key. He recovers his first position and repeats this movement three times, becoming more and more animated, the last time making a vigorous gesture toward the kneeling man's breast as if shooting him. (See Fig. 15, page 192.) While this is going on, the preceptor and his assistants place their hands upon the candidate's shoulders and cause his body to tremble.

Then the next Midē', the third of the quartette, goes through a similar series of forward movements and thrusts with his Midē' sack, uttering similar sounds and shooting the sacred mī'gis—life—into the right breast of the candidate, who is agitated still more strongly than before. When the third Midē', the second in order of precedence, goes through similar gestures and pretends to shoot the mī'gis into the candidate's heart, the preceptors assist him to be violently agitated.

The leading priest now places himself in a threatening attitude and says to the Midē'; "Mī'-dzhi-de'-a-mi-shĭk'"—"put your helping heart with me"—, when he imitates his predecessors by saying, "yâ, hŏ', hŏ', hŏ', hŏ', hŏ', hŏ'," at the fourth time aiming the Midē' sack at the candidate's head, and as the mī'gis is supposed to be shot into it, he falls forward upon the ground, apparently lifeless.

Then the four Midē' priests, the preceptor and the assistant, lay their Midē'sacks upon his back and after a few moments a mī'gis shell drops from his mouth—where he had been instructed to retain it. The chief Midē' picks up the mī'gis and, holding it between the thumb and index finger of the right hand, extending his arm toward the candidate's mouth says "wâ! wâ! hĕ hĕ hĕ hĕ," the last syllable being uttered in a high key and rapidly dropped to a low note; then the same words are uttered while the mī'gis is held toward the east, and in regular succession to the south, to the west, to the north, then toward the sky. During this time the candidate has begun to partially revive and endeavor to get upon his knees, but when the Midē' finally places the mī'gis into his mouth again, he instantly falls upon the ground, as before. The Midē' then take up the sacks, each grasping his own as before, and as they pass around the inanimate body they touch it at various points, which causes the

candidate to "return to life." The chief priest then says to him, "Ō'mishga'n"—"get up"—which he does; then indicating to the holder of the Midē' drum to bring that to him, he begins tapping and presently sings the following song:



The words of the text signify, "This is what I am, my fellow Midē'; I fear all my fellow Midē'." The last syllables, hĭū', are meaningless.

At the conclusion of the song the preceptor prompts the candidate to ask the chief Midē':

Ni-kan' k'kĕ'-nō'-mo', ma^{n}-dzhi'-an na'-ka-mō'-in.
Colleague instruct me, give me a song.

In response to which the Midē' teaches him the following, which is uttered as a monotonous chant, viz:

We'-go-nĕn' ge-gwed'-dzhi-me-an', mi-dē'-wi-wĭn ke-kwed'-dzhi-me-an'? Ki'-ka-
What are you asking, grand medicine are you asking? I will
mi'-nin en-da-wĕn'-da ma-wi'-nĕn mi-dē'-wi-wĭn tshi-da-si-nē'-ga'-na-win'-da-mōn;
give you you want me to give you "grand medicine" always take care of;
ki-ĭn'-tshun-di'-nĕ-ma'-so-wĭn, tsho'-a-wa'-nin di'-sĕ-wan.
you have received it yourself, never forget.

To this the candidate, who is now a member, replies, ē^{n}, yes, i. e., assent, fully agreeing with the statement made by the Midē', and adds:

Mi-gwĕtsh' a-shi'-wa-ka-kish'-da-win be-mâ'-di-si'-an.
Thanks for giving to me life.

Then the priests begin to look around in search of spaces in which to seat themselves, saying:

Mi'-a-shi'-gwa ki'-tshi-an'-wâ-bin-da-man tshi-ō'-we-na'-bi-an.
Now is the time I look around where we shall be [sit].

and all go to such places as are made, or reserved, for them.

The new member then goes to the pile of blankets, robes, and other gifts and divides them among the four officiating priests, reserving some of less value for the preceptor and his assistant; whereas tobacco is carried around to each person present. All then make an offering of smoke, to the east, south, west, north, toward the center and top of the Midē'wigân—where Ki'tshi Man'idō presides—and to the earth. Then each person blows smoke upon his or her Midē' sack as an offering to the sacred mī'gis within.

The chief Midē' advances to the new member and presents him with a new Midē' sack, made of an otter skin, or possibly of the skin of the mink or weasel, after which he returns to his place. The new member rises, approaches the chief Midē', who inclines his head to the front, and, while passing both flat hands down over either side, says:

Mi-gwĕtsh', ni-ka'-ni, ni-ka'-ni, ni-ka'-ni, na-ka'.
Thanks, my colleagues, my colleagues, my colleagues.

Then, approaching the next in rank, he repeats the ceremony and continues to do so until he has made the entire circuit of the Midē'-wigân.

At the conclusion of this ceremony of rendering thanks to the members of the society for their presence, the newly elected Midē' returns to his place and, after placing within his Midē' sack his mī'gis, starts out anew to test his own powers. He approaches the person seated nearest the eastern entrance, on the south side, and, grasping his sack in a manner similar to that of the officiating priests, makes threatening motions toward the Midē' as if to shoot him, saying, "yâ, hŏ', hŏ', hŏ', hŏ', hŏ'," gradually raising his voice to a higher key. At the fourth movement he makes a quick thrust toward his victim, whereupon the latter falls forward upon the ground. He then proceeds to the next, who is menaced in a similar manner and who likewise becomes apparently unconscious from the powerful effects of the mī'gis. This is continued until all persons present have been subjected to the influence of the mī'gis in the possession of the new member. At the third or fourth experiment the first subject revives and sits up, the others recovering in regular order a short time after having been "shot at," as this procedure is termed.

When all of the Midē' have recovered a very curious ceremony takes place. Each one places his mī'gis shell upon the right palm and, grasping the Midē' sack with the left hand, moves around the inclosure and exhibits his mī'gis to everyone present, constantly uttering the word "hŏ', hŏ', hŏ', hŏ'," in a quick, low tone. During this period there is a mingling of all the persons present, each endeavoring to attract the attention of the others. Each Midē' then

pretends to swallow his mī'gis, when suddenly there are sounds of violent coughing, as if the actors were strangling, and soon thereafter they gag and spit out upon the ground the mī'gis, upon which each one falls apparently dead. In a few moments, however, they recover, take up the little shells again and pretend to swallow them. As the Midē' return to their respective places the mī'gis is restored to its receptacle in the Midē' sack.

Food is then brought into the Midē'wigân and all partake of it at the expense of the new member.

After the feast, the older Midē' of high order, and possibly the officiating priests, recount the tradition of the Ani'shinâ'bēg and the origin of the Midē'wiwin, together with speeches relating to the benefits to be derived through a knowledge thereof, and sometimes, tales of individual success and exploits. When the inspired ones have given utterance to their thoughts and feelings, their memories and their boastings, and the time of adjournment has almost arrived, the new member gives an evidence of his skill as a singer and a Midē'. Having acted upon the suggestion of his preceptor, he has prepared some songs and learned them, and now for the first time the opportunity presents itself for him to gain admirers and influential friends, a sufficient number of whom he will require to speak well of him, and to counteract the evil which will be spoken of him by enemies—for enemies are numerous and may be found chiefly among those who are not fitted for the society of the Midē', or who have failed to attain the desired distinction.

The new member, in the absence of a Midē' drum of his own, borrows one from a fellow Midē' and begins to beat it gently, increasing the strokes in intensity as he feels more and more inspired, then sings a song (Pl. x, D), of which the following are the words, each line being repeated ad libitum, viz:

We'-nen-wi'-wik ka'-ni-an.

The spirit has made sacred the place in which I live.

[The singer is shown partly within, and partly above his wigwam, the latter being represented by the lines upon either side, and crossing his body.]

En'-da-yan' pi-ma'-ti-su'-i-ŭn en'-da-yan'.

The spirit gave the "medicine" which we receive.

[The upper inverted crescent is the arch of the sky, the magic influence descending, like rain upon the earth, the latter being shown by the horizontal line at the bottom.]

Rest.

Nin'-nik-ka'-ni man'-i-dō.

I too have taken the medicine he gave us.

[The speaker's arm, covered with mī'gis, or magic influence, reaches toward the sky to receive from Ki'tshi Man'idō the divine favor of a Midē''s power.]

Ke-kĕk'-ō-ĭ-yan'.

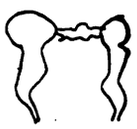
I brought life to the people.

[The Thunderer, the one who causes the rains, and consequently life to vegetation, by which the Indian may sustain life.]

Be-mo'-se ma-kō'-yan.

I have come to the medicine lodge also.

[The Bear Spirit, one of the guardians of the Midē'wiwin, was also present, and did not oppose the singer's entrance.]



Ka'-ka-mi'-ni-ni'-ta.

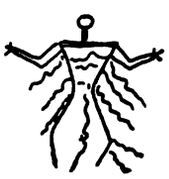
We spirits are talking together.

[The singer compares himself and his colleagues to spirits, i. e., those possessing supernatural powers, and communes with them as an equal.]

O-ni'-ni-shĭnk-ni'-yo.

The mī'gis is on my body.

[The magic power has been put into his body by the Midē priests.]



Ni man'-i-dō ni'-yăn.

The spirit has put away all my sickness.

[He has received new life, and is, henceforth, free from the disturbing influences of evil man'idōs.]

As the sun approaches the western horizon, the Midē' priests emerge from the western door of the Midē'wigân and go to their respective wig'iwams, where they partake of their regular evening repast, after which the remainder of the evening is spent in paying calls upon other members of the society, smoking, etc.

The preceptor and his assistant return to the Midē'wigân at nightfall, remove the degree post and plant it at the head of the wig'iwam —that part directly opposite the entrance—occupied by the new member. Two stones are placed at the base of the post, to represent the two forefeet of the bear Man'idō through whom life was also given to the Ani'shinâ'bēg.

If there should be more than one candidate to receive a degree the entire number, if not too great, is taken into the Midē'wigân for initiation at the same time; and if one day suffices to transact the

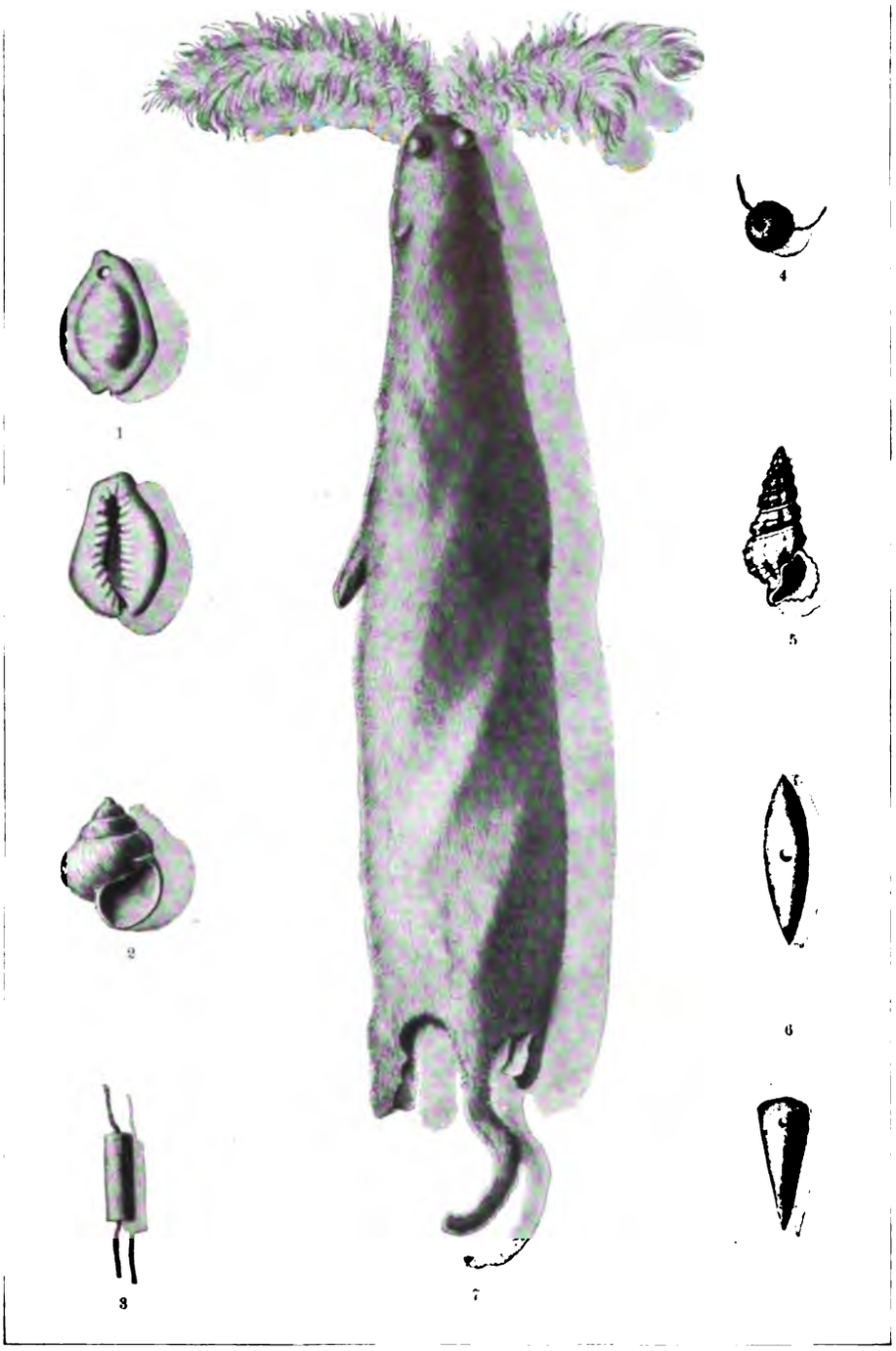
business for which the meeting was called the Indians return to their respective homes upon the following morning. If, however, arrangements have been made to advance a member to a higher degree, the necessary changes and appropriate arrangement of the interior of the Midē'wigân are begun immediately after the society has adjourned.

DESCRIPTIVE NOTES.

The mī'gis referred to in this description of the initiation consists of a small white shell, of almost any species, but the one believed to resemble the form of the mythical mī'gis is similar to the cowrie, Cypræa moneta, L., and is figured at No. 1 on Pl. XI. Nearly all of the shells employed for this purpose are foreign species, and have no doubt been obtained from the traders. The shells found in the country of the Ojibwa are of rather delicate structure, and it is probable that the salt water shells are employed as a substitute chiefly because of their less frangible character. The mī'gis of the other degrees are presented on the same plate, but special reference to them will be made. No. 2 represents the mī'gis in the possession of the chief Midē' priest of the society at Leech Lake, Minnesota, and consists of a pearl-white Helix (sp?).

FIG. 19—Hawk-leg fetish.

The Midē' sack represented in No. 7 (Pl. XI.) is made of the skin of a mink—Putorius vison, Gapp. White, downy feathers are secured to the nose, as an additional ornament. In this sack are carried the sacred objects belonging to its owner, such as colors for facial ornamentation, and the magic red powder employed in the preparation of hunters' songs; effigies and other contrivances to prove to the incredulous the genuineness of the Midē' pretensions, sacred songs, amulets, and other small man'idōs—abnormal productions to which they attach supernatural properties—invitation sticks, etc.



SACRED OBJECTS.

In Fig. 19 is reproduced a curious abnormal growth which was in the possession of a Midē' near Red Lake, Minnesota. It consists of the leg of a Goshawk—Astur atricapillus, Wilson—from the outer inferior condyle of the right tibia of which had projected a supernumerary leg that terminated in two toes, the whole abnormality being about one-half the size and length of the natural leg and toes.

This fetish was highly prized by its former owner, and was believed to be a medium whereby the favor of the Great Thunderer, or Thunder God, might be invoked and his anger appeased. This deity is represented in pictography by the eagle, or frequently by one of the Falconidæ; hence it is but natural that the superstitious should look with awe and reverence upon such an abnormality on one of the terrestrial representatives of this deity.

A Midē' of the first degree, who may not be enabled to advance further in the mysteries of the Midē'wiwin, owing to his inability to procure the necessary quantity of presents and gifts which he is required to pay to new preceptors and to the officiating priests—the latter demanding goods of double the value of those given as an entrance to the first degree—may, however, accomplish the acquisition of additional knowledge by purchasing it from individual Midē'. It is customary with Midē' priests to exact payment for every individual remedy or secret that may be imparted to another who may desire such information. This practice is not entirely based upon mercenary motives, but it is firmly believed that when a secret or remedy has been paid for it can not be imparted for nothing, as then its virtue would be impaired, if not entirely destroyed, by the man'idō or guardian spirit under whose special protection it may be supposed to be held or controlled.

Under such circumstances certain first degree Midē' may become possessed of alleged magic powers which are in reality part of the accomplishments of the Midē' of the higher degrees; but, for the mutual protection of the members of the society, they generally hesitate to impart anything that may be considered of high value. The usual kind of knowledge sought consists of the magic properties and use of plants, to the chief varieties of which reference will be made in connection with the next degree.

There is one subject, however, which first-degree Midē' seek enlightment upon, and that is the preparation of the "hunter's medicine" and the pictographic drawings employed in connection therewith. The compound is made of several plants, the leaves and roots of which are ground into powder. A little of this is put into the gun barrel, with the bullet, and sometimes a small pinch is dropped upon the track of the animal to compel it to halt at whatever place it may be when the powder is so sprinkled upon the ground.

The method generally employed to give to the hunter success is as follows: When anyone contemplates making a hunting trip, he first visits the Midē', giving him a present of tobacco before announc-

ing the object of his visit and afterwards promising to give him such and such portions of the animal which he may procure. The Midē', if satisfied with the gift, produces his pipe and after making an offering to Ki'tshi Man'idō for aid in the preparation of his "medicine," and to appease the anger of the man'idŏ who controls the class of animals desired, sings a song, one of his own composition, after which he will draw with a sharp-pointed bone or nail, upon a small piece of birch bark, the outline of the animal desired by the applicant. The place of the heart of the animal is indicated by a puncture upon which a small quantity of vermilion is carefully rubbed, this color being very efficacious toward effecting the capture of the animal and the punctured heart insuring its death.

Frequently the heart is indicated by a round or triangular figure, from which a line extends toward the mouth, generally designated the life line, i. e., that magic power may reach its heart and influence the life of the subject designated. Fig. 20 is a reproduction of the character drawn upon a small oval piece of birch bark, which had been made by a Midē' to insure the death of two bears. Another example is presented in Fig. 21, a variety of animals being figured and a small quantity of vermilion being rubbed upon the heart of each. In some instances the representation of animal forms is drawn

Fig. 20—Hunter's medicine.

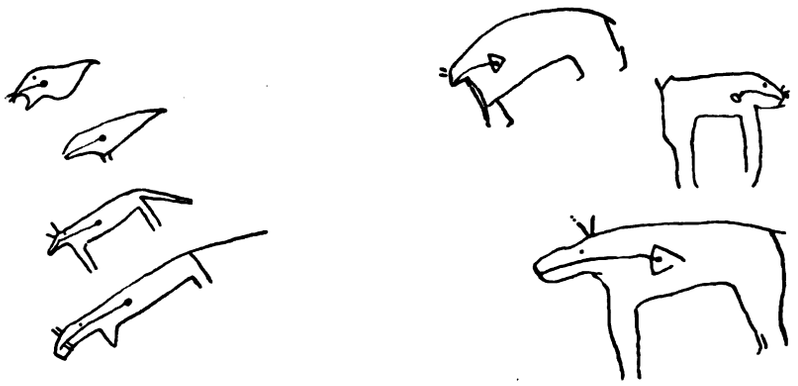


Fig. 21—Hunter's medicine.

by the Midē' not upon birch bark, but directly upon sandy earth or a bed of ashes, either of which affords a smooth surface. For this purpose he uses a sharply pointed piece of wood, thrusts it into the region of the heart, and afterwards sprinkles upon this a small quantity of powder consisting of magic plants and vermilion. These performances are not conducted in public, but after the regular mystic ceremony has been conducted by the Midē' the information is delivered with certain injunctions as to the course of procedure, direction,

etc. In the latter method of drawing the outline upon the sand or upon ashes, the result is made known with such directions as may be deemed necessary to insure success.

For the purpose of gaining instruction and success in the disposition of his alleged medicines, the Midē' familiarizes himself with the topography and characteristics of the country extending over a wide area, to ascertain the best feeding grounds of the various animals and their haunts at various seasons. He keeps himself informed by also skillfully conducting inquiries of returning hunters, and thus becomes possessed of a large amount of valuable information respecting the natural history of the surrounding country, by which means he can, with a tolerable amount of certainty, direct a hunter to the best localities for such varieties of game as may be particularly desired by him.

In his incantations a Wâbĕnō' uses a drum resembling a tambourine. A hoop made of ash wood is covered with a piece of rawhide, tightly stretched while wet. Upon the upper surface is painted a mythic figure, usually that of his tutelaly daimon. An example of this kind is from Red Lake, Minnesota, presented in Fig. 22. The human figure is painted red, while the outline of the head is black, as are also the waving lines extending from the head. These lines denote superior power. When drumming upon this figure, the Wâbĕnō' chants and is thus more easily enabled to invoke the assistance of his man'idō.

Fig. 22, Wâbĕnō' drum.

Women, as before remarked, may take the degrees of the Midē'wiwin, but, so far as could be ascertained, their professions pertain chiefly to the treatment of women and children and to tattooing for the cure of headache and chronic neuralgia.

Tattooing is accomplished by the use of finely powdered charcoal, soot or gunpowder, the pricking instrument being made by tying together a small number of needles; though formerly, it is said, fish spines or sharp splinters of bone were used for the purpose. The marks consist of round spots of one-half to three-fourths of an inch in diameter immediately over the afflicted part, the intention being to drive out the demon. Such spots are usually found upon the temples, though an occasional one may be found on the forehead or over the nasal eminence.

When the pain extends over considerable space the tattoo marks are smaller, and are arranged in rows or continuous lines. Such marks may be found upon some individuals to run outward over either or both cheeks from the alæ of the nose to a point near the

lobe of the ear, clearly indicating that the tattooing was done for toothache or neuralgia.

The female Midē' is usually present at the initiation of new members, but her duties are mainly to assist in the singing and to make herself generally useful in connection with the preparation of the medicine feast.

SECOND DEGREE.

The inclosure within which the second degree of the Midē'wiwin is conferred, resembles in almost every respect that of the first, the only important difference being that there are two degree posts instead of one. A diagram is presented in Fig. 23. The first post is planted a short distance beyond the middle of the floor—toward the western door—and is similar to the post of the first degree, i. e., red, with a band of green around the top, upon which is perched the stuffed body of an owl, the kŏ-ko'-kŏ-ō'. The second post, of similar size, is painted red, and over the entire surface of it are spots of white made by applying clay with the finger tips. (Pl. XV, No. 2.) These spots are symbolical of the sacred mī'gis, the great number of them denoting increased power of the magic influence which fills the Midē'wigân. A small cedar tree is also planted at each of the outer angles of the inclosure.

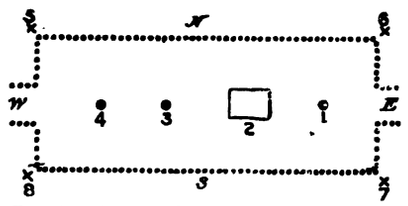


FIG. 23.—Diagram of Midē'wigân of the second degree.

The sweat-lodge, as before, is erected at some distance east of the main entrance of the Midē'wigân, but a larger structure is arranged upon a similar plan; more ample accommodations must be provided to permit a larger gathering of Midē' priests during the period of preparation and instruction of the candidate.

PREPARATION OF CANDIDATE.

A Mīdē' of the first degree is aware of the course to be pursued by him when he contemplates advancement into the next higher grade. Before making known to the other members his determination, he is compelled to procure, either by purchase or otherwise, such a quantity of blankets, robes, peltries, and other articles of apparel or ornament as will amount in value to twice the sum at which were estimated the gifts presented at his first initiation. A year or more usually elapses before this can be accomplished, as but one hunting season intervenes before the next annual meeting of the society, when furs are in their prime; and fruits and maple sugar can be gathered but once during the season, and these may be converted into money with which to purchase presents not always found

at the Indian traders' stores. Friends may be called upon to advance goods to effect the accomplishment of his desire, but such loans must be returned in kind later on, unless otherwise agreed. When a candidate feels convinced that he has gathered sufficient material to pay for his advancement, he announces to those members of the society who are of a higher grade than the first degree that he wishes to present himself at the proper time for initiation. This communication is made to eight of the highest or officiating priests, in his own wig'iwam, to which they have been specially invited. A feast is prepared and partaken of, after which he presents to each some tobacco, and smoking is indulged in for the purpose of making proper offerings, as already described. The candidate then informs his auditors of his desire and enumerates the various goods and presents which he has procured to offer at the proper time. The Midē' priests sit in silence and meditate; but as they have already been informally aware of the applicant's wish, they are prepared as to the answer they will give, and are governed according to the estimated value of the gifts. Should the decision of the Midē' priests be favorable, the candidate procures the services of one of those present to assume the office of instructor or preceptor, to whom, as well as to the officiating priests, he displays his ability in his adopted specialties in medical magic, etc. He seeks, furthermore, to acquire additional information upon the preparation of certain secret remedies, and to this end he selects a preceptor who has the reputation of possessing it.

For acting in the capacity of instructor, a Midē' priest receives blankets, horses, and whatever may be mutually agreed upon between himself and his pupil. The meetings take place at the instructor's wig'iwam at intervals of a week or two; and sometimes during the autumn months, preceding the summer in which the initiation is to be conferred, the candidate is compelled to resort to a sudatory and take a vapor bath, as a means of purgation preparatory to his serious consideration of the sacred rites and teachings with which his mind "and heart" must henceforth be occupied, to the exclusion of everything that might tend to divert his thoughts.

What the special peculiarities and ceremonials of initiation into the second degree may have been in former times, it is impossible to ascertain at this late day. The only special claims for benefits to be derived through this advancement, as well as into the third and fourth degrees, are, that a Midē' upon his admission into a new degree receives the protection of that Man'idō alleged and believed to be the special guardian of such degree, and that the repetition of initiation adds to the magic powers previously received by the initiate. In the first degree the sacred mīgis was "shot" into the two sides, the heart, and head of the candidate, whereas in the second degree this sacred, or magic, influence, is directed by the priests

toward the candidate's joints, in accordance with a belief entertained by some priests and referred to in connection with the Red Lake chart presented on Pl. III. The second, third, and fourth degrees are practically mere repetitions of the first, and the slight differences between them are noted under their respective captions.

In addition to a recapitulation of the secrets pertaining to the therapeutics of the Midē', a few additional magic remedies are taught the candidate in his preparatory instruction. The chief of these are described below.

Ma-kwa' wī'-i-sŏp, "Bear's Gall," and Pī'-zhi-ki wī'-i-sŏp, "Ox Gall," are both taken from the freshly killed animal and hung up to dry. It is powdered as required, and a small pinch of it is dissolved in water, a few drops of which are dropped into the ear of a patient suffering from earache.

Gō'-gi-mish (gen. et sp. ?).—A plant, described by the preceptor as being about 2 feet in height, having black bark and clusters of small red flowers.

1. The bark is scraped from the stalk, crushed and dried. When it is to be used the powder is put into a small bag of cloth and soaked in hot water to extract the virtue. It is used to expel evil man'idōs which cause obstinate coughs, and is also administered to consumptives. The quantity of bark derived from eight stems, each 10 inches long, makes a large dose. When a Midē' gives this medicine to a patient, he fills his pipe and smokes, and before the tobacco is all consumed the patient vomits.
2. The root of this plant mixed with the following is used to produce paralysis of the mouth. In consequence of the power it possesses it is believed to be under the special protection of the Midē' Man'idō, i. e., Ki'tshi Man'idō.

The compound is employed also to counteract the evil intentions, conjurations, or other charms of so-called bad Midē', Wâbĕnō', and Jĕs'sakkīd'.

Tzhi-bē'-gŏp—"Ghost Leaf."

After the cuticle is removed from the roots the thick under-bark is crushed into a powder. It is mixed with Gō'gimish.

Dzhi-baī'-ē-mŏk'-ke-zĭn'—"Ghost Moccasin;" "Puff-ball."

The spore-dust of the ball is carefully reserved to add to the above mixture.

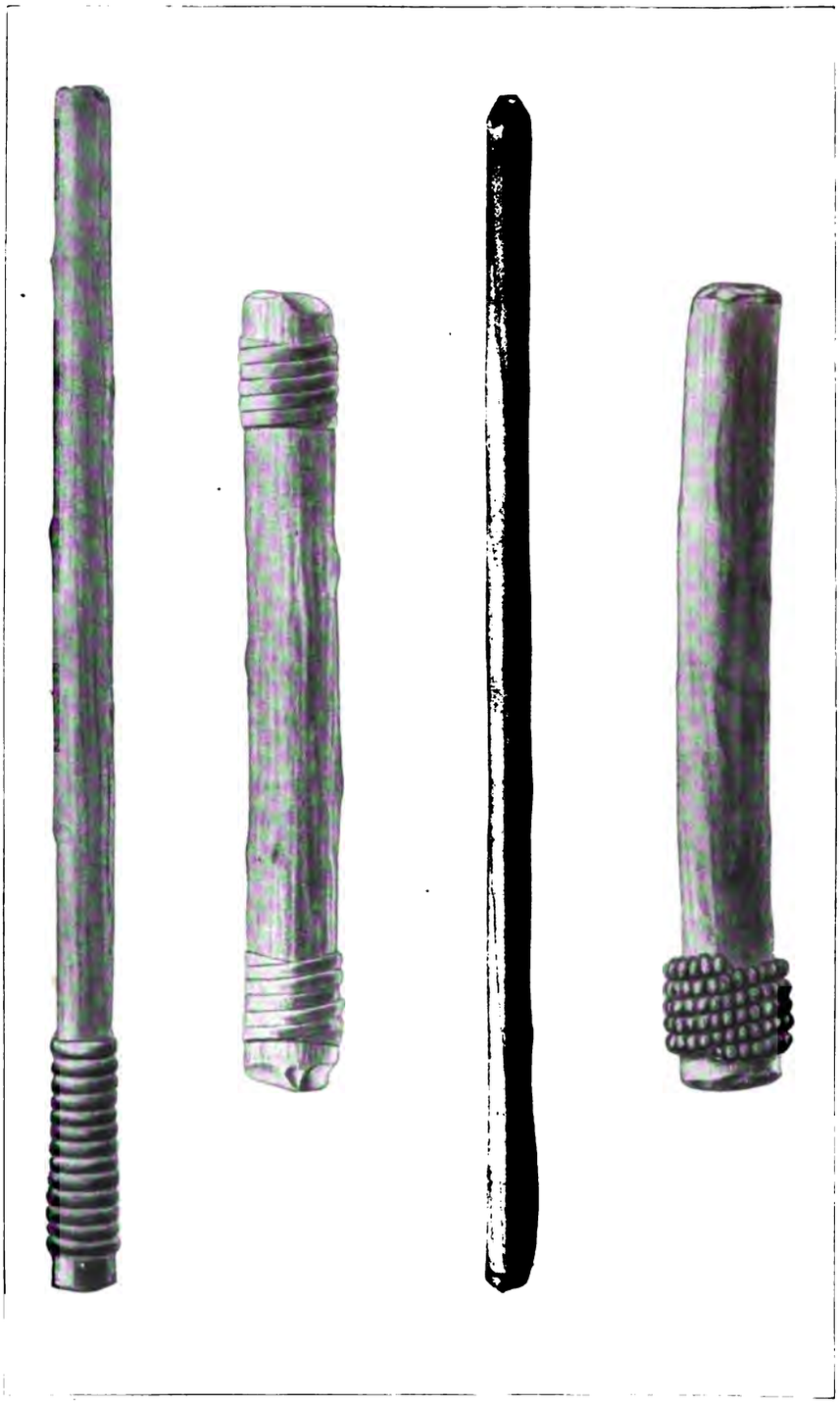
O-kwē'-mish—"Bitter Black Cherry."

The inner bark of branches dried and crushed is also added.

Nē'-wē—"Rattlesnake" (*Crotalus durissus, L.*).

The reptile is crushed and the blood collected, dried, and used in a pulverulent form. After partially crushing the body it is hung up and the drippings collected and dried. Other snakes may be employed as a substitute.

It is impossible to state the nature of the plants mentioned in the above compound, as they are not indigenous to the vicinity of White Earth, Minnesota, but are procured from Indians living in the eastern extremity of the State and in Wisconsin. Poisonous plants are of rare occurrence in this latitude, and if any actual poisonous properties exist in the mixture they may be introduced by the Indian himself, as strychnia is frequently to be purchased at almost any of the stores, to be used in the extermination of noxious animals. Admitting that crotalus venom may be present, the introduction into the human circulation of this substance would without doubt produce death and not paralysis of the facial muscles, and if taken into the stomach it quickly undergoes chemical change when brought in contact with the gastric juice, as is well known



INVITATION STICKS.

from experiments made by several well known physiologists, and particularly by Dr. Coxe (Dispensatory, 1839), who employed the contents of the venom sack, mixed with bread, for the cure of rheumatism.

I mention this because of my personal knowledge of six cases at White Earth, in which paralysis of one side of the face occurred soon after the Midē' administered this compound. In nearly all of them the distortion disappeared after a lapse of from six weeks to three months, though one is known to have continued for several years with no signs of recovery. The Catholic missionary at White Earth, with whom conversation was held upon this subject, feels impressed that some of the so-called "bad Midē'" have a knowledge of some substance, possibly procured from the whites, which they attempt to employ in the destruction of enemies, rivals, or others. It may be possible that the instances above referred to were cases in which the dose was not sufficient to kill the victim, but was enough to disable him temporarily. Strychnia is the only substance attainable by them that could produce such symptoms, and then only when given in an exceedingly small dose. It is also alleged by almost every one acquainted with the Ojibwa that they do possess poisons, and that they employ them when occasion demands in the removal of personal enemies or the enemies of those who amply reward the Midē' for such service.

When the time of ceremony of initiation approaches, the chief Midē' priest sends out a courier to deliver to each member an invitation to attend (Pl. XII), while the candidate removes his wig'iwam to the vicinity of the place where the Midē'wigân has been erected. On the fifth day before the celebration he visits the sweat-lodge, where he takes his first vapor bath, followed on the next by another; on the following day he takes the third bath, after which his preceptor visits him. After making an offering to Ki'tshi Man'idō the priest sings a song, of which the characters are reproduced in Pl. XIII, A. The Ojibwa words employed in singing are given in the first lines, and are said to be the ancient phraseology as taught for many generations. They are archaic, to a great extent, and have additional meaningless syllables inserted, and used as suffixes which are intoned to prolong notes. The second line of the Ojibwa text consists of the words as they are spoken at the present time, to each of which is added the interpretation. The radical similarity between the two is readily perceived.

Hi'-na-wi'-a-ni-ka^{n}. (As sung.)
We'-me-a' ni-kan mi'-sha man'-i-dō
I am crying my colleague great spirit.
ni-wa'-ma-bi-go' ma'-wi-yan'.
He sees me crying.

[The singer is represented as in close relationship or communion with Ki'tshi Man'idō, the circle denoting union; the short zigzag lines within which, in this instance, represent the tears, i. e., "eye rain," directed toward the sky.]

Ki-nŭn'-no, hē', ki-mun'-i-dō'-we, hē'.
esh'-i-ha'-ni. (As sung.)
Gi-nŭn'-dōn ni-kan' ē-zhi-an.
I hear you, colleague, what you say to me.

[The singer addresses the Otter Spirit, whose figure is emerging from the Midē'wigân of which he is the chief guardian.]

Tē'-ti-wâ'-tshi-wi-mō' a-ni'-me-ga'-si. (As sung.)
Tē'-ti-wâ'-tshŏ-tâg' ni-mī'-gĭ-zĭm.
He will tell you [of] my migis
(— inform you).
tē'-ti-wa'-tshĭ-mo-ta' âg.
He it is who will tell you.

[The reference is to a superior spirit as indicated by the presence of horns, and the zigzag line upon the breast. The words signify that Ki'tshi Man'idō will make known to the candidate the presence within his body of the mī'gis, when the proper time arrives.]

Rest, or pause, in the song.

During this interval another smoke offering is made, in which the Midē' priest is joined by the candidate.

Hĭu'-a-me'-da-ma' ki'-a-wēn'-da-mag
man'-i-dō'-wĭt hĭu'-a-wen'-da-mag. (As sung.)
Ki-wĭn'-da-mag'-ū-nan man'-i-dō'-wid.
He tells us he is [one] of the man'idōs.

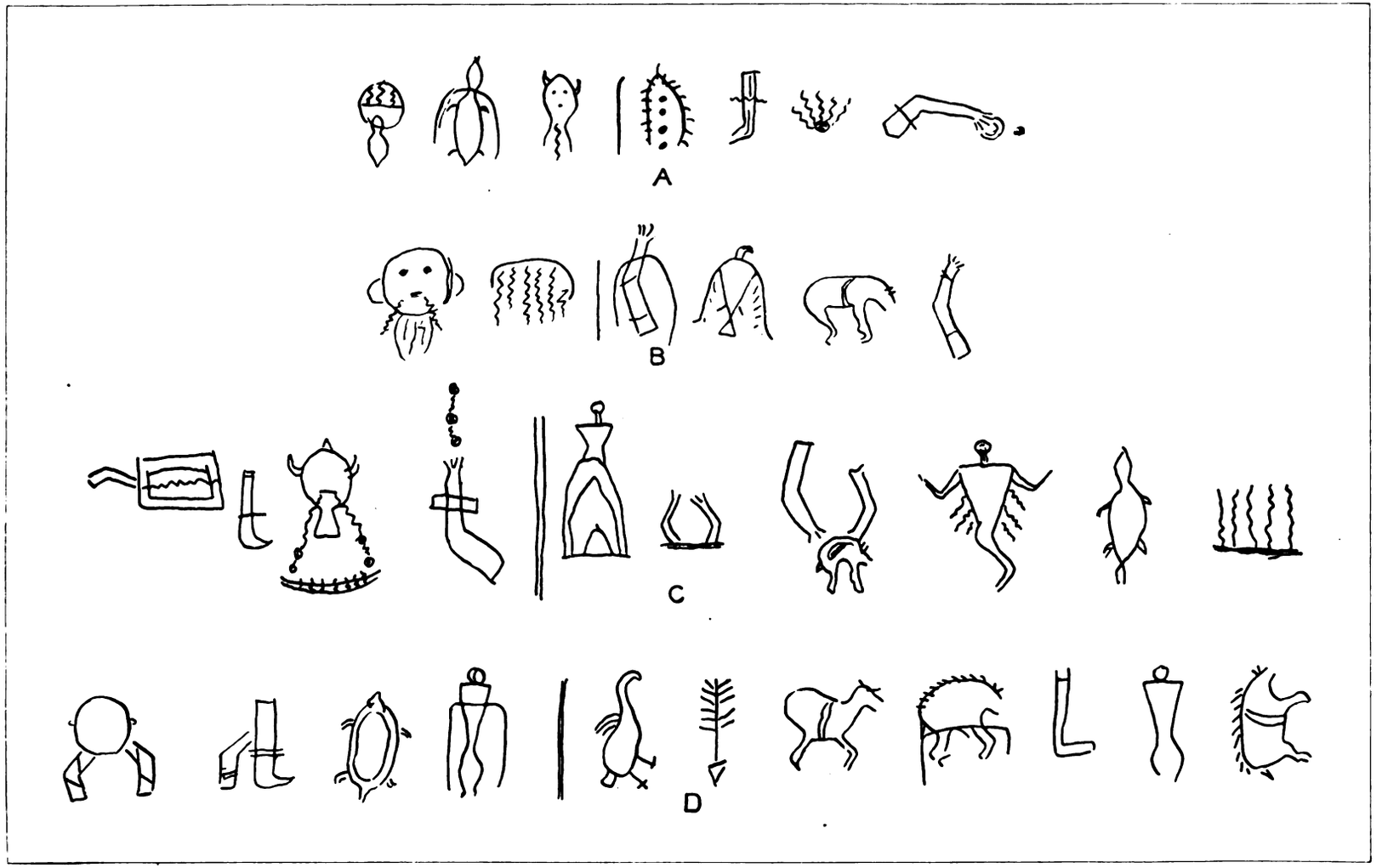
[This ma'nidō is the same as that referred to in the above-named phrase. This form is different, the four spots denoting the four sacred mī'gis points upon his body, the short radiating lines referring to the abundance of magic powers with which it is filled.]

Wa'-sa-wa'-dī, hē', wen'-da-na-ma',
mĭ-tē'-wi[n]. (As sung.)
Wa'-sa-wa'-dŭn'-da-na-ma'
I get it from afar
mi-dē'-wi-wĭn'.
The "grand medicine."

[The character represents a leg, with a magic line drawn across the middle, to signify that the distance is accomplished only through the medium of supernatural powers. The place "from afar" refers to the abode of Ki'tshi Man'idō.]

Ki-go'-na-bi-hi[u] ē'-ni-na mi-tē'. (As sung.)
Ki[n]-do'-na-bī-in' mi-dē'-wi-wĭn-ni-ni'
I place you there "in the grand medicine" (among the "Midē' people")
a-bit'-da-win'.
Half way (in the Midē'wigân).

[The Midē' priest informs the candidate that the second initiation will advance the candidate half way into the secrets of the Midē'wigân. The candidate is then placed so that his body will have more magic influence and power as indicated by the zigzag lines radiating from it toward the sky.]



MNEMONIC SONGS.

Hi'-sha-we-ne'-me-go', hē', nē'.
Ni-go'-tshi-mi, hē'. (As sung.)
Ni'-sha-we'-ni-mi-go' ĕ'-ne-mâ'-bi-dzhĭk.
They have pity on me those who are sitting here.

[This request is made to the invisible man'idōs who congregate in the Midē'wigân during the ceremonies, and the statement implies that they approve of the candidate's advancement.]

Another smoke offering is made upon the completion of this song, after which both individuals retire to their respective habitations. Upon the following day, that being the one immediately preceding the day of ceremony, the candidate again repairs to the sudatory to take a last vapor bath, after the completion of which he awaits the coming of his preceptor for final conversation and communion with man'idōs respecting the step he is prepared to take upon the morrow.

The preceptor's visit is merely for the purpose of singing to the candidate, and impressing him with the importance of the rites of the Midē'wigân. After making the usual offering of tobacco smoke the preceptor becomes inspired and sings a song, the following being a reproduction of the one employed by him at this stage of the preparatory instruction. (See Pl. XIII B.)

Man'-i-dō', hē', nē', man'-i-dō', hē', nē'.
Spirit, spirit,
Ni'-man-i-dō' win'-da-bi-an'.
I am a spirit (is) the reason why I am here.

[The zigzag lines extending downward and outward from the mouth indicate singing. He has reached the power of a man'idō, and is therefore empowered to sit within the sacred inclosure of the Midē'wigân, to which he alludes.]

Da'-bĭ-wă-ni', ha', hē',
Aⁿ'-nĭn, e-kō'-wē-an'.
Drifting snow, why do I sing.

[The first line is sung, but no interpretation of the words could be obtained, and it was alleged that the second line contained the idea to be expressed. The horizontal curve denotes the sky, the vertical zigzag lines indicating falling snow—though being exactly like the lines employed to denote rain. The drifting snow is likened to a shower of delicate mī'gis shells or spots, and inquiry is made of it to account for the feeling of inspiration experienced by the singer, as this shower of mī'gis descends from the abode of Kī'tshi Man'idō and is therefore, in this instance, looked upon as sacred.]

Rest, or pause.

Gi-man'-i-dō'-wē, ni'-me-ne'-ki-nan'
wan-da.
Gi'-a-wĭngk, gi-man'-i-dō'-a-ni-min',
Your body, I believe it is a spirit.

Gi-a-wĭngk.
your body.

[The first line is sung, but the last word could not be satisfactorily explained. The first word, as now pronounced, is Ki'tshi Man'idō, and the song is addressed to him. The curved line, from which the arm protudes, is the Midē'wigân and the arm itself is that of the speaker in the attitude of adoration; reaching upward in worship and supplication.]

Pi-nē'-si ne'-pi-mi'-a ni^{n}'-ge-gē'-kwe-a^{n}
The bird as I promise the falcon
mi-we'-tshi-man'-i-dō'-wid.
the reason he is a spirit.

[The second word is of archaic form and no agreement concerning its correct signification could be reached hy the Midē'. The meaning of the phrase appears to be that Ki'tshi Man'idō promised to create the Thunder-bird, one of the man'idōs. The falcon is here taken as a representative of that deity, the entire group of Thunderers being termed a-ni'-mi-ki'.]

Zhĭn'-gwe mi'-shi-ma-kwa'
Makes a great noise the bear.
we^{n}'-dzhi-wa-ba-mok-kwēd' kŭn-nēt'.
the reason I am of flame.

[The character of the bear represents the great bear spirit of the malevolent type, a band about his body indicating his spirit form. By means of his power and influence the singer has become endowed with the ability of changing his form into that of the bear, and in this guise accomplishing good or evil. The reference to flame (fire) denotes the class of conjurers or Shamans to which this power is granted, i. e., the Wâbĕnō', and in the second degree this power is reached as will be referred to further on.]

Ni'-a-wen'-din-da-sa', ha', sa', man'-i-dō'-wid.
Gi'-a-wĭngk in'-do-sa man'-i-dō'-wid.
In your body I put it the spirit.

[The first line is sung, and is not of the modern style of spoken language. The second line signifies that the arm of Ki'tshi Man'idō, through the intermediary of the Midē' priest, will put the spirit, i. e., the mī'gis, into the body of the candidate.]

The singer accompanies his song either by using a short baton of wood, termed "singing stick" or the Midē' drum. After the song is completed another present of tobacco is given to the preceptor, and after making an offering of smoke both persons return to their respective wig'iwams. Later in the evening the preceptor calls upon the candidate, when both, with the assistance of friends, carry the presents to the Midē'wigân, where they are suspended from the raft-

ers, to be ready for distribution after the initiation on the following day. Several friends of the candidate, who are Midē′, are stationed at the doors of the Midē′wigân to guard against the intrusion of the uninitiated, or the possible abstraction of the gifts by strangers.

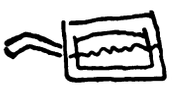
INITIATION OF CANDIDATE.

The candidate proceeds early on the morning of the day of initiation to take possession of the sweat-lodge, where he awaits the coming of his preceptor and the eight officiating priests. He has an abundance of tobacco with which to supply all the active participants, so that they may appease any feeling of opposition of the man′idōs toward the admission of a new candidate, and to make offerings of tobacco to the guardian spirit of the second degree of the Midē′wiwin. After the usual ceremony of smoking individual songs are indulged in by the Midē′ priests until such time as they may deem it necessary to proceed to the Midē′wigân, where the members of the society have long since gathered and around which is scattered the usual crowd of spectators. The candidate leads the procession from the sweat-lodge to the eastern entrance of the Midē′-wigân, carrying an ample supply of tobacco and followed by the priests who chant. When the head of the procession arrives at the door of the sacred inclosure a halt is made, the priests going forward and entering. The drummer, stationed within, begins to drum and sing, while the preceptor and chief officiating priest continue their line of march around the inclosure, going by way of the south or left hand. Eight circuits are made, the last terminating at the main or eastern entrance. The drumming then ceases and the candidate is taken to the inner side of the door, when all the members rise and stand in their places. The officiating priests approach and stand near the middle of the inclosure, facing the candidate, when one of them says to the Midē′ priest beside the latter: O-da′-pin a-sē′-ma—"Take it, the tobacco," whereupon the Midē′ spoken to relieves the candidate of the tobacco and carries it to the middle of the inclosure, where it is laid upon a blanket spread upon the ground. The preceptor then takes from the cross-poles some of the blankets or robes and gives them to the candidate to hold. One of the malevolent spirits which oppose the entrance of a stranger is still supposed to remain with the Midē′wigân, its body being that of a serpent, like flames of fire, reaching from the earth to the sky. He is called I′-shi-ga-nē′-bĭ-gŏg—"Big-Snake." To appease his anger the candidate must make a present; so the preceptor says for the candidate:

Ka-wĭ′ⁿ-nĭ-na-ga′ wa′-ba-ma′-si-ba′-shĭ-gi′-ne-gĕt′?
Do you not see how he carries the goods?

This being assented to by the Midē′ priests the preceptor takes the blankets and deposits them near the tobacco upon the ground. Slight taps upon the Midē′ drum are heard and the candidate is led

toward the left on his march round the interior of the Midē'wigân, the officiating priests following and being followed in succession by all others present. The march continues until the eighth passage round, when the members begin to step back into their respective places, while the officiating Midē' finally station themselves with their backs toward the westernmost degree post, and face the door at the end of the structure. The candidate continues round to the western end, faces the Midē' priests, and all sit down. The following song is then sung, which may be the individual production of the candidate (Pl. XIII, C). A song is part of the ritual, though it is not necessary that the candidate should sing it, as the preceptor may do so for him. In the instance under my observation the song was an old one (which had been taught the candidate), as the archaic form of pronunciation indicates. Each of the lines is repeated as often as the singer may desire, the prolongation of the song being governed by his inspired condition. The same peculiarity governs the insertion, between words and at the end of lines, of apparently meaningless vowel sounds, to reproduce and prolong the last notes sounded. This may be done ad libitum, rythmical accentuation being maintained by gently tapping upon the Midē' drum.



Hĭa'-ni-de hĕn'-da man'-i-dō, hō',
nĭ'-sha-bon'-de man'-i-dō'-en-dât.
Where is the spirit lodge? I go through it.

[The oblong structure represents the Midē'wigân, the arm upon the left indicating the course of the path leading through it, the latter being shown by a zigzag line.]

Nin-gō'-sa mĭ-dē'-kwe ni-ka' na'-ska-wa'.
I am afraid of the "grand medicine" woman; I go to her.

[A leg is shown to signify locomotion. The singer fears the opposition of a Midē' priestess and will conciliate her.]

Ka-ni-sa' hĭ'-a-tshĭ'-mĭn-dē' man'-ski-kī', dē', hē', hē'.
Kinsmen who speak of me, they see the striped sky.

[A person of superior power, as designated by the horns attached to the head. The lines from the mouth signify voice or speech, while the horizontal lines denote the stratus clouds, the height above the earth of which illustrates the direction of the abode of the spirit whose conversation, referring to the singer, is observed crossing them as short vertical zigzag lines; i. e., voice lines.]

Ke'-na-nan'-do-mē' ko-nō'-ne-nak
ka-ne-hē' nin-ko'-tshi nan'-no-me'.
The cloud looks to me for medicine.

[The speaker has become so endowed with the power of magic influence that he has preference with the superior Man'idōs. The magic influence is shown descending to the hand which reaches beyond the cloud indicated by the oblong square upon the forearm.]

Rest, after which dancing begins.

Wa-tshu'-a-nē' ke'-ba-bing'-e-on', wa-dzhū.
Going into the mountains.
[The singer's thoughts go to the summit to commune with Ki'tshi Man'idō. He is shown upon the summit.]

Hi'-mĕ-de'-wa hen'-dĕ-a he'-na.
The grand medicine affects me.
[In his condition he appeals to Ki'tshi Man'idō for aid. The arms represent the act of supplication.]

Hai'-an-go ho'-ya o'-gĕ-ma, ha'.
The chief goes out.
[The arms grasp a bear—the Bear Man'idō—and the singer intimates that he desires the aid of that powerful spirit, who is one of the guardians of the Midē'wigân.]

Nish'-o-wē' ni-mē'-hi-gō', hē', ni-gō'-tshi-mi'-go-we, hē'.
Have pity on me wherever I have medicine.
[The speaker is filled with magic influence, upon the strength of which he asks the Bear to pity and to aid him.]

Wi'-so-mi'-ko-wē' hĕ-a-za-we'-ne-ne-gō', hō'.
I am the beaver; have pity on me.
[This is said to indicate that the original maker of the mnemonic song was of the Beaver totem or gens.]

Hēn'-ta-no-wik'-ko-we' de-wĕn'-da ĕn-da-â'-dân.
I wish to know what is the matter with me.

[The singer feels peculiarly impressed by his surroundings in the Midē'wigân, because the sacred man'idōs have filled his body with magic powers. These are shown by the zigzag or waving lines descending to the earth.]

As each of the preceding lines or verses is sung in such a protracted manner as to appear like a distinct song, the dancers, during the intervals of rest, always retire to their places and sit down.

The dancing is not so energetic as many of those commonly indulged in for amusement only. The steps consist of two treading movements made by each foot in succession. Keeping time with the drum-beats, at the same time there is a shuffling movement made by the dancer forward, around and among his companions, but getting back toward his place before the verse is ended. The attitude during these movements consists in bending the body forward, while the knees are bent, giving one the appearance of searching for a lost object. Those who do not sing give utterance to short, deep grunts, in accordance with the alternate heavier strokes upon the drum.

As the dancing ceases, and all are in their proper seats, the preceptor, acting for the candidate, approaches the pile of tobacco and distributes a small quantity to each one present, when smoking is indulged in, preceded by the usual offering to the east, the south, the west, the north, the sky and the earth.

After the completion of this ceremonial an attendant carries the Midē' drum to the southeast angle of the inclosure, where it is delivered to the drummer; then the officiating priests rise and approach within two or three paces of the candidate as he gets upon his knees. The preceptor and the assistant who is called upon by him take their places immediately behind and to either side of the candidate, and the Midē' priest lowest in order of precedence begins to utter quick, deep tones, resembling the sound hŏ', hŏ', hŏ', hŏ', hŏ', at the same time grasping his midē' sack with both hands, as if it were a gun, and moving it in a serpentine and interrupted manner toward one of the large joints of the candidate's arms or legs. At the last utterance of this sound he produces a quick puff with the breath and thrusts the bag forward as if shooting, which he pretends to do, the missile being supposed to be the invisible sacred mī'gis. The other priests follow in order from the lowest to the highest, each selecting a different joint, during which ordeal the candidate trembles more and more violently until at last he is overcome with the magic influence and falls forward upon the ground unconscious. The Midē' priests then lay their sacks upon his back, when the candidate begins to recover and spit out the mī'gis shell which he had previously hidden within his mouth. Then the chief Midē' takes it up between the tips of the forefinger and thumb and goes through the ceremony described in connection with the initiation into the first degree, of holding it toward the east, south, west, north, and the sky, and finally to the mouth of the candidate, when the latter, who has partly recovered from his apparently insensible condition, again relapses into that state. The eight priests then place their sacks to the respective joints at which they previously directed them, which fully infuses the body with the magic influence as desired. Upon this the candidate recovers, takes up the mī'gis shell and, placing it upon his left palm, holds it forward and swings it from side to side, saying he!

he! he! he! he! and pretends to swallow it, this time only reeling from its effects. He is now restored to a new life for the second time; and as the priests go to seek seats he is left on the southern side and seats himself. After all those who have been occupied with the initiation have hung up their midē′ sacks on available projections against the wall or branches, the new member goes forward to the pile of tobacco, blankets, and other gifts and divides them among those present, giving the larger portions to the officiating priests. He then passes around once more, stopping before each one to pass his hands over the sides of the priests' heads, and says:

Mi-gwĕtah′ ga-shi-tō′-win bi-mâ′-dĭ-si-wĭn,′
Thanks for giving to me life,

after which he retreats a step, and clasping his hands and bowing toward the priest, says:

Ni-ka′-ni ni-ka′ni ni-ka′-ni ka-nia′,
fellow midē′ fellow midē′ fellow midē′,

to which each responds hau′, ē^{n}. The word hau′ is a term of approbation, ē^{n} signifying yes, or affirmation, the two thus used together serving to intensify the expression. Those of the Midē′ present who are of the second, or even some higher degree, then indulge in the ceremony of passing around to the eastern part of the inclosure, where they feign coughing and gagging, so as to produce from the mouth the mī′gis shell, as already narrated in connection with the first degree, p. 192.

This manner of thanking the officiating Midē′ for their services in initiating the candidate into a higher degree is extended also to those members of the Midē′wiwin who are of the first degree only, in acknowledgment of the favor of their presence at the ceremony, they being eligible to attend ceremonial rites of any degree higher than the class to which they belong, because such men are neither benefited nor influenced in any way by merely witnessing such initiation, but they must themselves take the principal part in it to receive the favor of a renewed life and to become possessed of higher power and increased magic influence.

Various members of the society indulge in short harangues, recounting personal exploits in the performance of magic and exorcism, to which the auditors respond in terms of gratification and exclamations of approval. During these recitals the ushers, appointed for the purpose, leave the inclosure by the western door to return in a short time with kettles of food prepared for the midē′ feast. The ushers make four circuits of the interior, giving to each person present a quantity of the contents of the several vessels, so that all receive sufficient to gratify their desires. When the last of the food has been consumed, or removed, the midē′ drum is heard, and soon a song is started, in which all who desire join. After the first two or three verses of the song are recited, a short interval of

rest is taken, but when it is resumed dancing begins and is continued to the end. In this manner they indulge in singing and dancing, interspersed with short speeches, until the approach of sunset, when the members retire to their own wig'iwams, leaving the Midē'wigân by the western egress.

The ushers, assisted by the chief Midē', then remove the sacred post from the inclosure and arrange the interior for new initiations, either of a lower or higher class, if candidates have prepared and presented themselves. In case there is no further need of meeting again at once, the members of the society and visitors return upon the following day to their respective homes.

DESCRIPTIVE NOTES.

The mī'gis shell employed in the second degree initiation is of the same species as those before mentioned. At White Earth, however, some of the priests claim an additional shell as characteristic of this advanced degree, and insist that this should be as nearly round as possible, having a perforation through it by which it may be secured with a strand or sinew. In the absence of a rounded white shell a bead may be used as a substitute. On Pl. XI, No. 4, is presented an illustration of the bead (the second-degree mi'gis) presented to me on the occasion of my initiation.

With reference to the style of facial decoration resorted to in this degree nearly all of the members now paint the face according to their own individual tastes, though a few old men still adhere to the traditional method previously described (pp. 180, 181). The candidate usually adopts the style practiced by his preceptor, to which he is officially entitled; but if the preceptor employed in the preparatory instruction for the second degree be not the same individual whose services were retained for the first time, then the candidate has the privilege of painting his face according to the style of the preceding degree. If he follow his last preceptor it is regarded as an exceptional token of respect, and the student is not expected to follow the method in his further advancement.

A Midē' of the second degree is also governed by his tutelary daimon; e. g., if during the first fast and vision he saw a bear, he now prepares a necklace of bear-claws, which is worn about the neck and crosses the middle of the breast. He now has the power of changing his form into that of a bear; and during that term of his disguise he wreaks vengeance upon his detractors and upon victims for whose destruction he has been liberally rewarded. Immediately upon the accomplishment of such an act he resumes his human form and thus escapes identification and detection. Such persons are termed by many "bad medicine men," and the practice of thus debasing the sacred teachings of the Midē'wiwin is discountenanced by members of the society generally. Such pretensions are firmly believed in

and acknowledged by the credulous and are practiced by that class of Shamans here designated as the Wâbĕnō'.

In his history [1] Rev. Mr. Jones says:

> As the powwows always unite witchcraft with the application of their medicines I shall here give a short account of this curious art.
>
> Witches and wizards are persons supposed to possess the agency of familiar spirits from whom they receive power to inflict diseases on their enemies, prevent good luck of the hunter and the success of the warrior. They are believed to fly invisibly at pleasure from place to place; to turn themselves into bears, wolves, foxes, owls, bats, and snakes. Such metamorphoses they pretend to accomplish by putting on the skins of these animals, at the same time crying and howling in imitation of the creature they wish to represent. Several of our people have informed me that they have seen and heard witches in the shape of these animals, especially the bear and the fox. They say that when a witch in the shape of a bear is being chased all at once she will run round a tree or a hill, so as to be lost sight of for a time by her pursuers, and then, instead of seeing a bear they behold an old woman walking quietly along or digging up roots, and looking as innocent as a lamb. The fox witches are known by the flame of fire which proceeds out of their mouths every time they bark.
>
> Many receive the name of witches without making any pretensions to the art, merely because they are deformed or ill-looking. Persons esteemed witches or wizards are generally eccentric characters, remarkably wicked, of a ragged appearance and forbidding countenance. The way in which they are made is either by direct communication with the familiar spirit during the days of their fasting, or by being instructed by those skilled in the art.

A Midē' of the second degree has the reputation of superior powers on account of having had the mī'gis placed upon all of his joints, and especially because his heart is filled with magic power, as is shown in Pl. III, No. 48. In this drawing the disk upon the breast denotes where the mī'gis has been "shot" into the figure, the enlarged size of the circle signifying "greater abundance," in contradistinction to the common designation of a mī'gis shown only by a simple spot or small point. One of this class is enabled to hear and see what is transpiring at a remote distance, the lines from the hands indicating that he is enabled to grasp objects which are beyond the reach of a common person, and the lines extending from the feet signifying that he can traverse space and transport himself to the most distant points. Therefore he is sought after by hunters for aid in the discovery and capture of game, for success in war, and for the destruction of enemies, however remote may be their residence.

When an enemy or a rival is to be dealt with a course is pursued similar to that followed when preparing hunting charts, though more powerful magic medicines are used. In the following description of a pictograph recording such an occurrence the Midē', or rather the Wâbĕnō', was of the fourth degree of the Midē'wiwin. The indication of the grade of the operator is not a necessary part of the record, but in this instance appears to have been prompted

[1] History of the Ojebway Indians, etc., London (1843?), pp. 145, 146.

from motives of vanity. The original sketch, of which Fig. 24 is a reproduction, was drawn upon birch-bark by a Midē', in 1884, and the ceremony detailed actually occurred at White Earth, Minnesota. By a strange coincidence the person against whom vengeance was aimed died of pneumonia the following spring, the disease having resulted from cold contracted during the preceding winter. The victim resided at a camp more than a hundred miles east of the locality above named, and his death was attributed to the Midē''s power, a reputation naturally procuring for him many new adherents and disciples. The following is the explanation as furnished by a Midē' familiar with the circumstances:

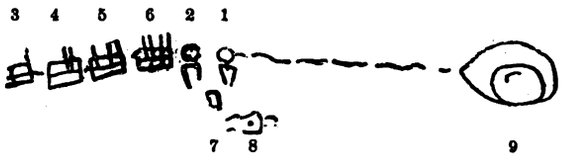


FIG. 24—Midē' destroying an enemy.

No. 1 is the author of the chart, a Midē' who was called upon to take the life of a man living at a distant camp. The line extending from the midē' to the figure at No. 9, signifies that his influence will reach to that distance.

No. 2, the applicant for assistance.

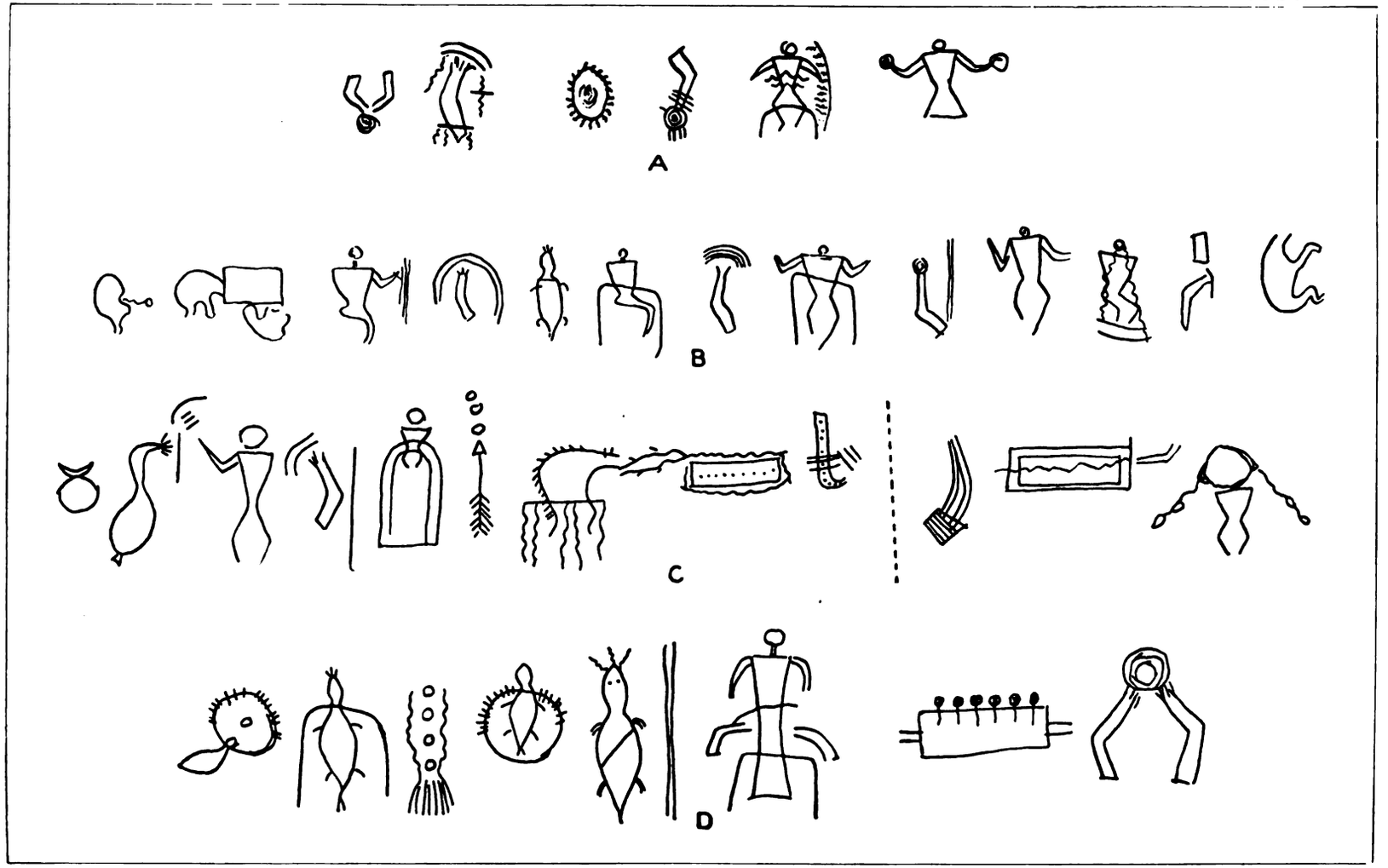
Nos. 3, 4, 5, and 6, represent the four degrees of the Midē'wiwin (of which the operator, in this instance, was a member). The degrees are furthermore specifically designated by short vertical strokes.

No. 7 is the midē' drum used during the ceremony of preparing the charm.

No. 8 represents the body of the intended victim. The heart is indicated, and upon this spot was rubbed a small quantity of vermilion.

No. 9 is the outline of a lake, where the subject operated upon resided.

War parties are not formed at this time, but mnemonic charts of songs used by priests to encourage war parties, are still extant, and a reproduction of one is given on Pl. XIII, D. This song was used by the Midē' priest to insure success to the parties. The members who intended participating in the exhibition would meet on the evening preceding their departure, and while listening to the words, some would join in the singing while others would dance. The lines may be repeated ad libitum so as to lengthen the entire series of phrases according to the prevalent enthusiasm and the time at the disposal of the performers. The war drum was used, and there were always five or six drummers so as to produce sufficient noise to accord with the loud and animated singing of a large body of excited men. This drum is, in size, like that employed for dancing. It is made by covering with rawhide an old kettle, or wooden vessel, from 2 to 3 feet in diameter. The drum is then attached to four sticks, or short posts, so as to prevent its touching the ground, thus affording every advantage for producing full and resonant sounds, when struck. The drumsticks are strong withes, at the end of each of which is fastened a ball of buckskin thongs. The following lines are repeated ad libitum:



MNEMONIC SONGS.

Hu'-na-wa'-na ha'-wā,
un-do'-dzhe-na' ha-we'-nĕ.
I am looking [feeling] for my paint.

[The Midē''s hands are at his medicine sack searching for his war paint.]

Hĭa'-dzhi-mĭn-de' non'-da-kō', hō',
They hear me speak of legs.

[Refers to speed in the expedition. To the left of the leg is the arm of a spirit, which is supposed to infuse magic influence so as to give speed and strength.]

Hu'-wa-ke', na', ha',
He said,

[The Turtle Man'idō will lend his aid in speed. The turtle was one of the swiftest man'idōs, until through some misconduct, Min'abō'zho deprived him of his speed.]

Wa'-tshe, ha', hwē, wa'-ka-te', hē', wa'-tshe, ha', hwē'.
Powder, he said.

[The modern form of Wa'-ka-te', he', hwā', is ma'-ka-dē'-hwa; other archaic words occur also in other portions of this song. The phrase signifies that the Midē' Man'idō favors good results from the use of powder. His form projects from the top of the Midē' structure.]

Rest. A smoke is indulged in after which the song is resumed, accompanied with dancing.

Sin-go'-na wa-kĭ' na-ha'-ka
I made him cry.

[The figure is that of a turkey buzzard which the speaker shot.]

Te-wa'-tshi-me-kwe'-na, ha', na-ke'-nan.
They tell of my powers.

[The people speak highly of the singer's magic powers; a charmed arrow is shown which terminates above with feather-web ornament, enlarged to signify its greater power.]

He'-wĕ-ne-nis'-sa ma-he'-ka-nĕn'-na.
What have I killed, it is a wolf.

[By aid of his magic influence the speaker has destroyed a bad man'-ido which had assumed the form of a wolf.]

Sun'-gu-we'-wa, ha', nin-dĕn', tshi'-man-da'-kwa ha'na-nĭn-dĕn'.
I am as strong as the bear.

[The Midē' likens his powers to those of the Bear Man'idō, one of the most powerful spirits; his figure protrudes from the top of the Midē'wigân while his spirit form is indicated by the short lines upon the back.]

Wa'-ka-na'-ni, hē', wa'-ka-na'-ni.

I wish to smoke.

[The pipe used is that furnished by the promoter or originator of the war party, termed a "partisan." The Midē' is in full accord with the work undertaken and desires to join, signifying his wish by desiring to smoke with the braves.]

He'-wa-hō'-a hai'-a-nē'

I even use a wooden image.

[Effigies made to represent one who is to be destroyed. The heart is punctured, vermilion or other magic powder is applied, and the death of the victim is encompassed.]

Pa-kwa' ma-ko-nē' ā', ō', hē',
ōsh-ke'-na-ko-nē'-a.

The bear goes round angry.

[The Bear Man'idō is angry because the braves are dilatory in going to war. The sooner they decide upon this course, the better it will be for the Midē' as to his fee, and the chances of success are greater while the braves are infused with enthusiasm, than if they should become sluggish and their ardor become subdued.]

THIRD DEGREE.

The structure in which the third degree of the Midē'wiwin is conferred resembles that of the two preceding, and an outline is presented in Fig. 25. In this degree three posts are erected, the first one resembling that of the first degree, being painted red with a band of green around the top. (Pl. xv, No. 1.) This is planted a short distance to the east of the middle of the floor. The second post is also painted red, but has scattered over its entire surface spots of white clay, each of about the size of a silver quarter of a dollar, symbolical of the mī'gis shell. Upon the top of this post is placed the stuffed body of an owl—Kŏ-kŏ-kŏ-ŏ'. (Pl. xv, No. 2.) This post is planted a short distance west of the first one and about midway between it and the third, which last is erected within about 6 or 8 feet from the western door, and is painted black. (Pl. xv, No. 3.) The sacred stone against which patients are placed, and which has the alleged virtue of removing or expelling the demons that cause disease, is placed upon the ground at the usual spot near the eastern entrance (Fig. 25, No. 1). The Makwá Man'idō—bear spirit—is the tutelary guardian of this degree. Cedar trees are planted at each of the outer angles of the structure (Fig. 25, Nos. 6, 7, 8, 9). The sudatory is erected about 100 yards due east of the main entrance of the Midē'wigân, and is of the same size and for the same purpose as that for the second degree.

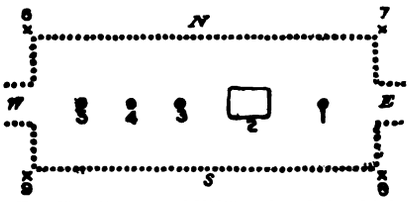
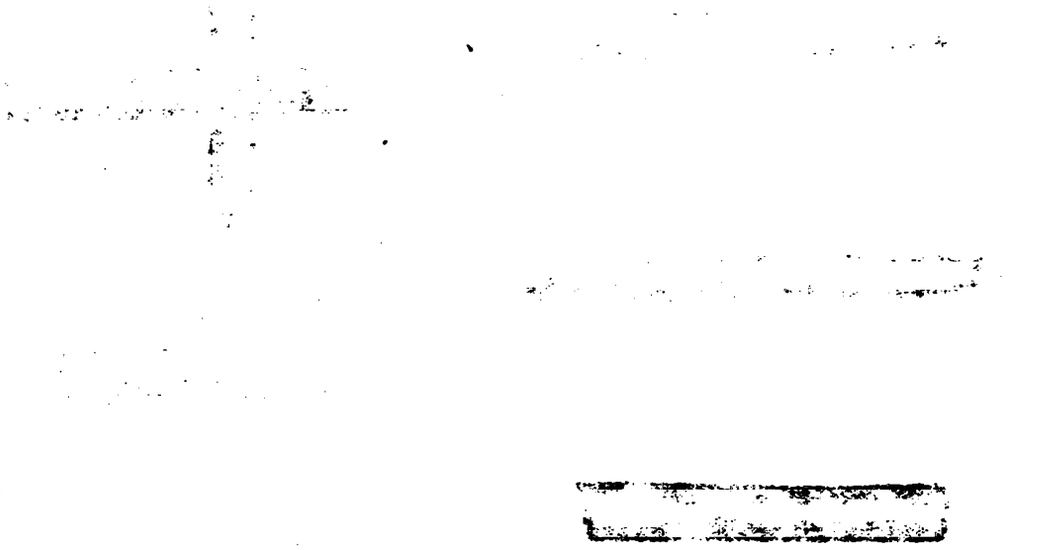
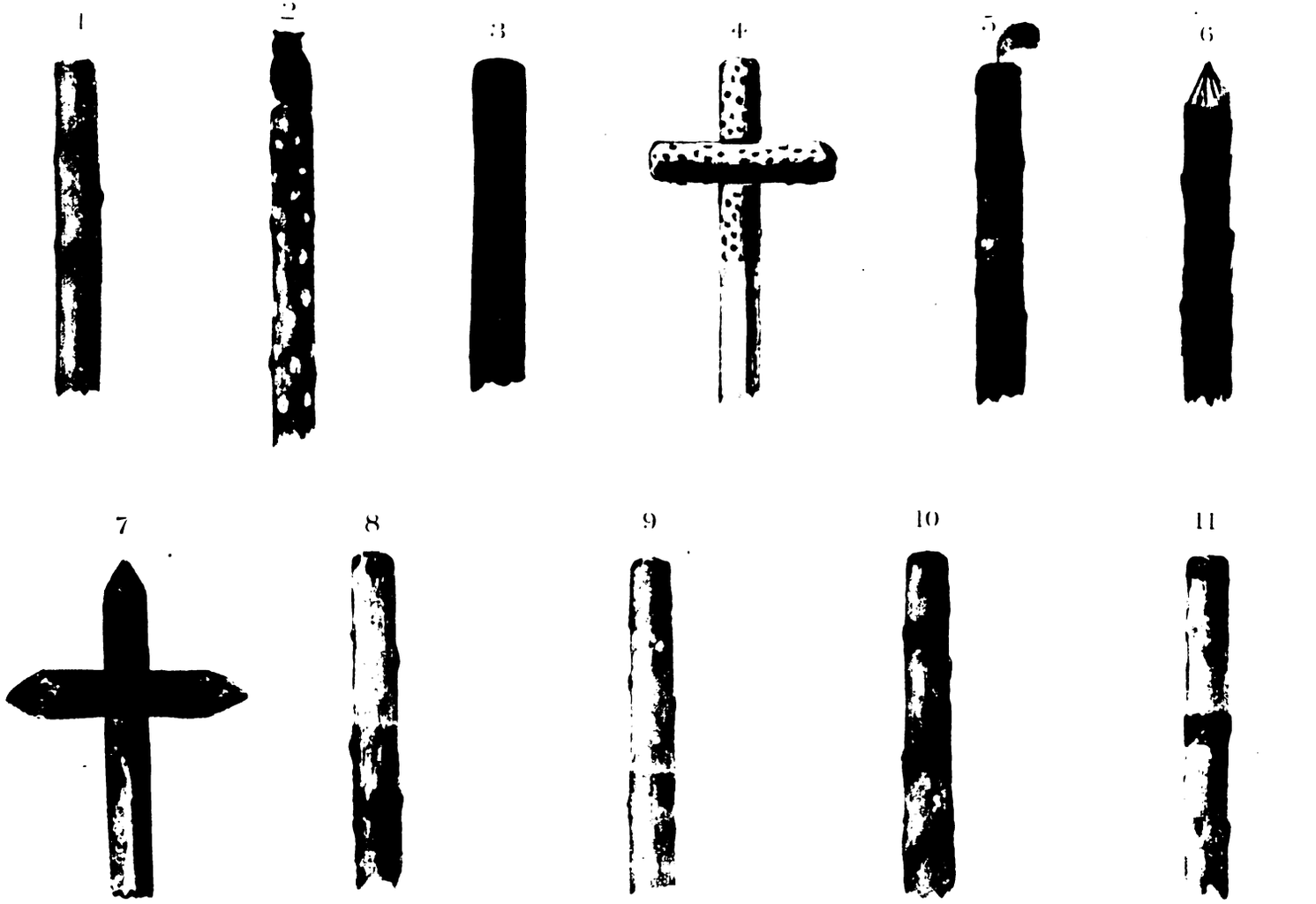


FIG. 25.—Diagram of Midē'wigân of the third degree.





SACRED POSTS OF MIDĒWIGÁN.

PREPARATION OF CANDIDATE.

It is customary for the period of one year to elapse before a second-degree Midē' can be promoted, even if he be provided with enough presents for such advancement. As the exacted fee consists of goods and tobacco thrice the value of the fee for the first degree, few present themselves. This degree is not held in as high estimation, relatively, as the preceding one; but it is alleged that a Midē"s powers are intensified by again subjecting himself to the ceremony of being "shot with the sacred mī'gis," and he is also elevated to that rank by means of which he may be enabled the better to invoke the assistance of the tutelary guardian of this degree.

A Midē' who has in all respects complied with the preliminaries of announcing to the chief Midē' his purpose, gaining satisfactory evidence of his resources and ability to present the necessary presents, and of his proficiency in the practice of medical magic, etc., selects a preceptor of at least the third degree and one who is held in high repute and influence in the Midē'wiwin. After procuring the services of such a person and making a satisfactory agreement with him, he may be enabled to purchase from him some special formulæ for which he is distinguished. The instruction embraces a résumé of the traditions previously given, the various uses and properties of magic plants and compounds with which the preceptor is familiar, and conversations relative to exploits performed in medication, incantation, and exorcism. Sometimes the candidate is enabled to acquire new "medicines" to add to his list, and the following is a translation of the tradition relating to the origin of ginseng (Aralia quinquefolia, Gr.), the so-called "man root," held in high estimation as of divine origin. In Fig. 3 is presented a pictorial representation of the story, made by Ojibwa, a Midē' priest of White Earth, Minnesota. The tradition purports to be an account of a visit of the spirit of a boy to the abode of Dzhibai' Man'idō, "the chief spirit of the place of souls," called Ne'-ba-gi'-zis, "the land of the sleeping sun."

There appears to be some similarity between this tradition and that given in connection with Pl. v, in which the Sun Spirit restored to life a boy, by which act he exemplified a portion of the ritual of the Midē'wiwin. It is probable therefore that the following tradition is a corruption of the former and made to account for the origin of "man root," as ginseng is designated, this root, or certain portions of it, being so extensively employed in various painful complaints.

Once an old Midē', with his wife and son, started out on a hunting trip, and, as the autumn was changing into winter, the three erected a substantial wig'iwam. The snow began to fall and the cold increased, so they decided to remain and eat of their stores, game having been abundant and a good supply having been procured.

The son died; whereupon his mother immediately set out for the village to obtain help to restore him to life, as she believed her father, the chief priest of the Midē'wiwin, able to accomplish this.

When the woman informed her father of the death of her son, her brother, who was present, immediately set out in advance to render assistance. The chief priest then summoned three assistant Midē', and they accompanied his daughter to the place where the body of his dead grandson lay upon the floor of the wig'iwam, covered with robes.

The chief Midē' placed himself at the left shoulder of the dead boy, the next in rank at the right, while the two other assistants stationed themselves at the feet. Then the youngest Midē'—he at the right foot of the deceased—began to chant a midē' song, which he repeated a second, a third, and a fourth time.

When he had finished, the Midē' at the left foot sang a midē' song four times; then the Midē' at the right shoulder of the body did the same, after which the chief Midē' priest sang his song four times, whereupon there was a perceptible movement under the blanket, and as the limbs began to move the blanket was taken off, when the boy sat up. Being unable to speak, he made signs that he desired water, which was given to him.

The four Midē' priests then chanted medicine songs, each preparing charmed remedies which were given to the boy to complete his recovery. The youngest Midē', standing at the foot of the patient, gave him four pinches of powder, which he was made to swallow; the Midē' at the left foot did the same; then the Midē' at the right shoulder did likewise, and he, in turn, was followed by the chief priest standing at the left shoulder of the boy; whereupon the convalescent immediately recovered his speech and said that during the time that his body had been in a trance his spirit had been in the "spirit land," and had learned of the "grand medicine."

The boy then narrated what his spirit had experienced during the trance, as follows: "Gi'-gi-min'-ĕ-go'-min mi-dē'-wi-wĭn mi-dē' man'-i-dō' 'n-gi-gĭn'-o-a-mâk ban-dzhi'-ge'-o-we'-ân ta'-zi-ne'-zho-wak' ni-zha'-nĕ-zak, kĭ-wi'-de-gĕt' mi'-o-pi'-ke'-ne-bŭi'-yan ka-ki'-nĕ ka-we'-dĕ-ge' mi'-o-wŏk-pi' i-kan'-o-a-mag'-i-na mi-dē' man'-i-dō wi-we'-ni-tshi mi-dē'-wi-wĭn, ki'-mi-mâ'-dĭ-si-win'-in-ân' ki-mi'-nĭ-go-nan' ge-on'-dĕ-na-mŏngk ki'-mi-mâ'-di-si'-wa-in-an'; ki'-ki-no'-a-mag'-wi-nan' mash'-kĭ-ki o-gi'-mi-ni'-go-wan' o-dzhi-bi'-gân gi-me'-ni-na-gŭk' mash'-kĭ-ki-wa'-bo" shtĭk-wan'-a-ko-se'-an o-ma'-mâsh'-kĭ-ki ma'-gi-ga'-to ki'-ka-ya-tōn."

The following is a translation:

He, the chief spirit of the Midē' Society, gave us the "grand medicine," and he has taught us how to use it. I have come back from the spirit land. There will be twelve, all of whom will take wives; when the last of these is no longer without a wife, then will I die. That is the time. The Midē' spirit taught us to do right. He gave us life and told us how to prolong it. These things he taught us, and gave us roots for medicine. I give to you medicine; if your head is sick, this medicine put upon it, you will put it on."

The revelation received by the boy was in the above manner imparted to the Indians. The reference to twelve—three times the sacred number four—signifies that twelve chief priests shall succeed each other before death will come to the narrator. It is observed, also, that a number of the words are archaic, which fact appears to be an indication of some antiquity, at least, of the tradition.

The following are the principal forms in which a Midē' will utilize Aralia quinquefolia, Gr., ginseng—Shtĕ'-na-bi-o'-dzhi-bik:

1. Small quantities of powdered root are swallowed to relieve stomachic pains.
2. A person complaining with acute pains in any specific part of the body is given that part of the root corresponding to the part affected; e. g., for pleurisy, the side of the root is cut out, and an infusion given to relieve such pains; if one has pains in the lower extremities, the bifurcations of the root are employed; should the pains be in the thorax, the upper part of the root—corresponding to the chest—is used in a similar manner.

INITIATION OF CANDIDATE.

As the candidate for promotion has acquired from his Midē' friends such new information as they choose to impart, and from his instructor all that was practicable, he has only to await the day of ceremony to be publicly acknowledged as a third-degree Midē'. As this time approaches the invitation sticks are sent to the various members and to such non-resident Midē' as the officiating priests may wish to honor. On or before the fifth day previous to the meeting the candidate moves to the vicinity of the Midē'wigân. On that day the first sweat bath is taken, and one also upon each succeeding day until four baths, as a ceremony of purification, have been indulged in. On the evening of the day before the meeting his preceptor visits him at his own wig'iwam when, with the assistance of friends, the presents are collected and carried to the Midē'-wigân and suspended from the transverse poles near the roof. The officiating priests may subsequently join him, when smoking and singing form the chief entertainment of the evening.

By this time numerous visitors have gathered together and are encamped throughout the adjacent timber, and the sound of the drum, where dancing is going on, may be heard far into the night.

Early on the morning of the day of the ceremonies the candidate goes to the sudatory where he first awaits the coming of his preceptor and later the arrival of the Midē' priests by whom he is escorted to the Midē'wigân. With the assistance of the preceptor he arranges his gift of tobacco which he takes with him to the sacred inclosure, after which a smoke offering is made, and later Midē' songs are chanted. These may be of his own composition as he has been a professor of magic a sufficient lapse of time to have composed them, but to give evidence of superior powers the chief, or some other of the officiating priests, will perhaps be sufficiently inspired to sing. The following was prepared and chanted by one of the Midē' priests at the third-degree meeting at White Earth, Minnesota, and the illustration in Pl. XVII, A, is a reproduction of the original. The words, with translation, are as follows:

Ni-ka'-ni-na man'-do-na-mō'-a.

My friend I am shooting into you in trying to hit the mark.

[The two arms are grasping the mī'gis, which he the Midē 'is going to shoot into the body of the candidate. The last word means, literally, trying to hit the mark at random.]

Me-kwa'-me-sha-kwak', mi-tē'-wi-da'.

While it is clear let us have it, the "grand medicine."

[The Midē' arm, signified by the magic zigzag lines at the lower end of the picture, reaches up into the sky to keep it clear; the rain is descending elsewhere as indicated by the lines descending from the sky at the right and left.]

Rest.

During this interval a smoke offering is made.

Mi-sha'-kwi-tō-nĭ mĭ'-gĭs-sĭm'.

As clear as the sky [is] my mĭ'gis.

[The figure represents the sacred mĭ'gis, as indicated by the short lines radiating from the periphery. The mĭ'gis is white and the clear sky is compared to it.]

Sōn'-gi-mi-dē' wi-ka'-ne, hē',
Wi-nō'-a man'-i-dō'-wi-dzhĭ'-id-e'-zhi-wât.

Take the "grand medicine" strong, as they, together with the "Great Spirit," tell me.

[The candidate is enjoined to persevere in his purpose. The associate Midē' are alluded to, as also Ki'tshi Man'idō, who urge his continuance and advancement in the sacred society. The arm reaches down to search for the sacred mĭ'gis of the fourth degree—designated by four vertical lines—which is, as yet, hidden from the person addressed.]

Hwa'-ba-mi-dē', hwa'-ba-mi-dē',
Na'-wa-kin-tē'.

He who sees me, he who sees me, stands on the middle of the earth.

[The human figure symbolizes Ki'tshi Man'idō; the magic lines cross his body, while his legs rest upon the outline of the Midē'wigân. His realm, the sky, reaches from the zenith to the earth, and he beholds the Midē' while chanting and conducting the Midē'wiwin.]

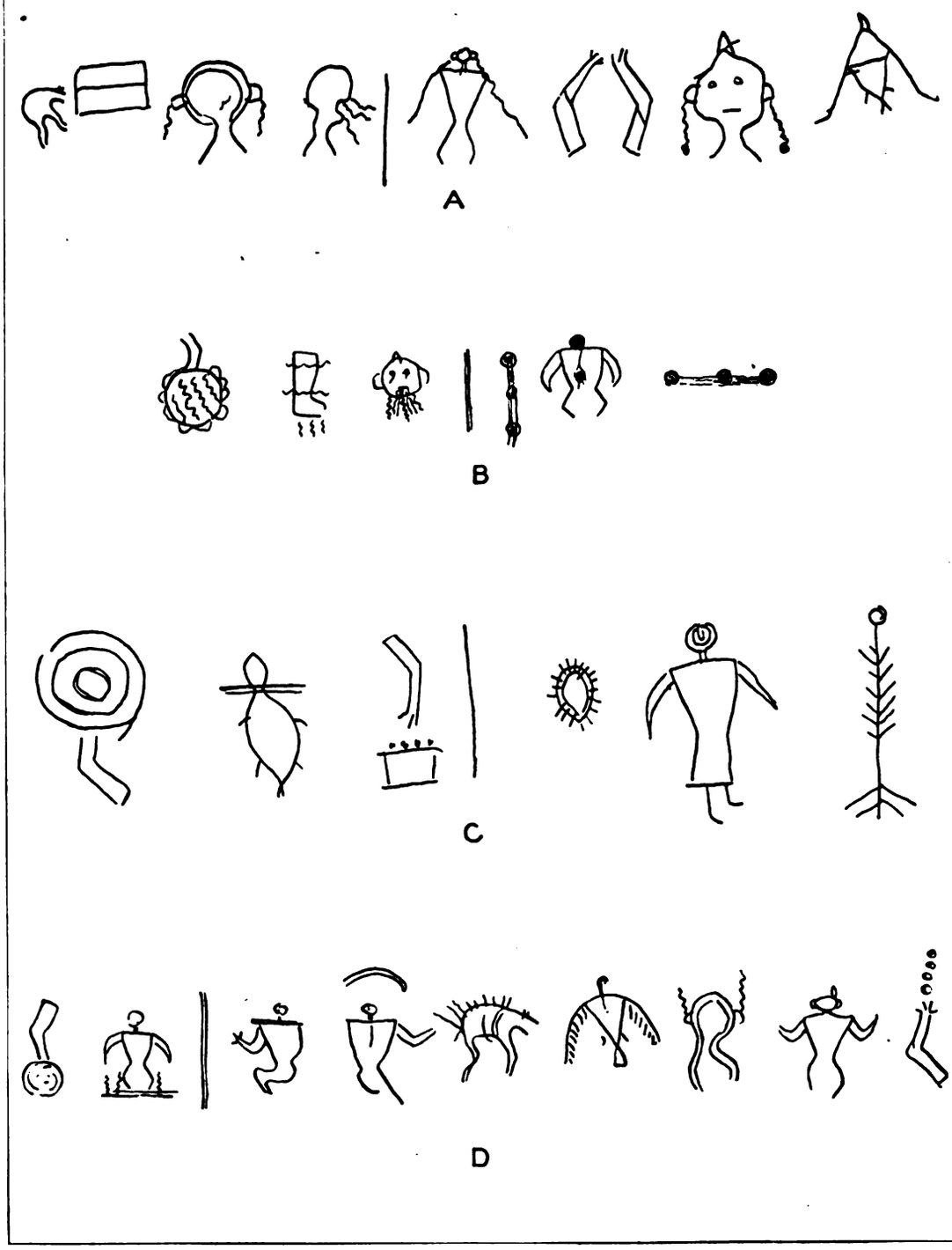
Man'-i-dō' wĭ'-ka-nĭ' ni-mi-dē'.

To the spirit be a friend, my Midē'.

[The speaker enjoins the candidate to be faithful to his charge, and thus a friend to Ki'tshi Man'idō, who in return will always assist him. The figure holds a mĭ'gis in its right hand, and the Midē' drum in its left.]

The greater number of words in the preceding text are of an archaic form, and are presented as they were chanted. The several lines may be repeated ad libitum to accord with the feeling of inspiration which the singer experiences, or the amount of interest manifested by his hearers.

All the members of the society not officially inducting the candidate have ere this entered the Midē'wigân and deposited their invitation sticks near the sacred stone, or, in the event of their inability



MNEMONIC SONGS.

to attend, have sent them with an explanation. The candidate, at the suggestion of the Midē' priest, then prepares to leave the sudatory, gathers up the tobacco, and as he slowly advances toward the Midē' inclosure his attendants fall into the procession according to their office. The priests sing as they go forward, until they reach the entrance of the Midē'wigân, where the candidate and his preceptor halt, while the remainder enter and take their stations just within the door, facing the west.

The drummers, who are seated in the southwestern angle of the inclosure, begin to drum and sing, while the candidate is led slowly around the exterior, going by the south, thus following the course of the sun. Upon the completion of the fourth circuit he is halted directly opposite the main entrance, to which his attention is then directed. The drumming and singing cease; the candidate beholds two Midē' near the outer entrance and either side of it. These Midē' represent two malevolent man'idō and guard the door against the entrance of those not duly prepared. The one upon the northern side of the entrance then addresses his companion in the following words: I'-ku-tan ka'-wi-nad'-gĭ wa'-na-mâ'-sĭ ē'-zhĭ-gĭ'-nĭ-gĕd—"Do you not see how he is formed?" To which the other responds: O-da'-pĭ-nŏ' ke'-no-wĭn-dŭng shkwan'-dĭm—"Take care of it, the door;" [i. e., guard the entrance.] The former then again speaks to his companion, and says: Ka-wīn'-nĭ-na-ga' wâ'-ba-ma'-si-ba'-shĭ-gi'-ne-gēt'—"Do you not see how he carries the goods?" The Midē' spoken to assents to this, when the preceptor takes several pieces of tobacco which he presents to the two guards, whereupon they permit the candidate to advance to the inner entrance, where he is again stopped by two other guardian man'idō, who turn upon him as if to inquire the reason of his intrusion. The candidate then holds out two parcels of tobacco and says to them: O-da'-pin a-sē'-ma—"Take it, the tobacco," whereupon they receive the gift and stand aside, saying: Kun'-da-dan—"Go down;" [i. e., enter and follow the path.] As the candidate is taken a few steps forward and toward the sacred stone, four of the eight officiating priests receive him, one replacing the preceptor who goes to the extreme western end there to stand and face the east, where another joins him, while the remaining two place themselves side by side so as to face the west.

It is believed that there are five powerful man'idŏs who abide within the third-degree Midē'wigân, one of whom is the Midē' man'idō —Ki'tshi Man'idō—one being present at the sacred stone, the second at that part of the ground between the sacred stone and the first part where the gifts are deposited, the remaining three at the three degree posts.

As the candidate starts and continues upon his walk around the interior of the inclosure the musicians begin to sing and drum, while all those remaining are led toward the left, and when opposite the

sacred stone he faces it and is turned round so that his back is not toward it in passing; the same is done at the second place where one of the spirits is supposed to abide; again at first, second, and third posts. By this time the candidate is at the western extremity of the structure, and as the second Midē' receives him in charge, the other taking his station beside the preceptor, he continues his course toward the north and east to the point of departure, going through similar evolutions as before, as he passes the three posts, the place of gifts and the sacred stone. This is done as an act of reverence to the man'idōs and to acknowledge his gratitude for their presence and encouragement. When he again arrives at the eastern extremity of the inclosure he is placed between the two officiating Midē', who have been awaiting his return, while his companion goes farther back, even to the door, from which point he addresses the other officiating Midē' as follows:

Mĭs-sa'-a-shi'-gwa wi-kan'-da'-we-an', mĭs-sa'-a-shi'-gwa wī'-di-wa'-mŏk wi-un'-
Now is the time [I am] telling [—advising,] now is the time to be observed [I am]

o-bē-ŏg.
ready to make him sit down.

Then one of the Midē' priests standing beside the candidate leads him to the spot between the sacred stone and the first-degree post where the blankets and other goods have been deposited, and here he is seated. This priest then walks slowly around him singing in a tremulous manner wa', hĕ', hĕ', hĕ', hĕ', hĕ', hĕ', hĕ', returning to a position so as to face him, when he addresses him as follows: Mĭs-sa'-a-shi'-gwa pŏ'-gŭ-sĕ-ni'mi-nan' au'-u-sa' za-a'-da-win' man'-i-dō mī'-gis. Na'-pish-gatsh di-mâ'-gĭ-sĭ ĕ-nĕ'-nĭ-mi-an pi'-sha-gâ-an-da-i' na'-pish-gatsh tshi-skwa'-di-na-wâd' dzhi-ma'-dzhi-a-ka'-ma-da-mân bi-mâ'-dĭs-si'-an.

The following is a free translation:

The time has arrived for you to ask of the Great Spirit this "reverence" i. e., the sanctity of this degree. I am interceding in your behalf, but you think my powers are feeble; I am asking him to confer upon you the sacred powers. He may cause many to die, but I shall henceforth watch your course of success in life, and learn if he will heed your prayers and recognize your magic power.

At the conclusion of these remarks three others of the officiating Midē' advance and seat themselves, with their chief, before the candidate. The Midē' drum is handed to the chief priest, and after a short prelude of drumming he becomes more and more inspired, and sings the following Midē' song, represented pictorially, also on Pl. XVII, B.

Man'-i-dō' we-da', man'-i-dō' gi-dō' we-do'-nĭng.
Let us be a spirit, let the spirit come from the mouth.
[The head is said to signify that of a Midē', who is about to sing.]

Nin′-de-wen′-don zha′-bon-dĕsh′-kâ³-mân′.
I own this lodge, through which I pass.

[The speaker claims that he has been received into the degree of the Midē′wiwin to which he refers. The objects on the outer side of the oblong square character represent spirits, those of the bear.]

Ân′-dzhe-ho ĭ′-a-ni′ o-gĕn′, hwe′-ō-ke′, hwe′-ō-ke′.
Mother is having it over again.

[The reference is to the earth, as having the ceremony of the "grand medicine" again.]

Ni′-ka-nan ni′-go-sân, ni′-go-sân′
ni-ka′-ni-san′, man′-i-dō′ wi-dzhig′
nin-go-sân′ an-i-wa′-bi-dzhig ni-ka′.
Friends I am afraid, I am afraid, friends, of the spirits sitting around me.

[The speaker reaches his hand toward the sky, i. e., places his faith in Ki′tshi Man′idō who abides above.]

Ya′-ki-no′-sha-me′-wa, ya′-ki-no′-sha-me′-wa.
ya-ki-no-si-ka-ne, ya-ki-no-si-ka-ne,
hē′, ki′-no-sha′-we-wa′.
I am going, with medicine bag, to the lodge.

[The object represents an otter skin Midē′ sack, the property of the speaker.]

Ya′-be-kai′-a-bi, ya′-be-kai′-a-bi, hē′-ā′, hē′-ā′,
ya′-be-kai′-a-bi, ya′-be-kai′-a-bi, hē′-ā′, hē′ā′,
wa′-na-he′-ni′-o-ni′, ya′-be-kai′-o-bik′.
We are still sitting in a circle.

[A Midē′ sitting within the Midē′wigân; the circle is shown.]

A-ya′-a-bi-ta′ pa′-ke-zhĭk′, ū′, hū′, a′,
Half the sky

[The hand is shown reaching toward the sky, imploring the assistance of Ki′tshi Man′idō that the candidate may receive advancement in power. He has only two degrees, one-half of the number desired.]

Ba′-be-ke′ o′-gi-mân nish′-a-we, hē′,
ne′-me-ke-hē′, nish′-a-we′-ni-mĭk o′-gi-mân.
The spirit has pity on me now,

[The "Great Spirit" is descending upon the Midē′wigân, to be present during the ceremony.]

Nin-dai′-a, nin-dai′-a, ha′,
we′-ki-ma′, ha′, wâ-no-kwe′.
In my heart, in my heart, I have the spirit.

[The hand is holding the mĭ′gis, to which reference is made.]

I-ke′-u-ha′-ma man-ta-na′-ki-na ni-ka′-ni
I take the earth, my Midē′ friends.

[The earth furnishes the resources necessary to the maintenance of life, both food and medicines.]

Wī'-a-ya'-din shin-da', hān',
man-da'-ha-nī', o-hō' ni-bĭ'.
Let us get him to take this water.
[The figure sees medicine in the earth, as the lines from the eyes to the horizontal strokes indicate.]

Hŭe'-shĭ-shi-kwa'-ni-an nin-ga'-ga-mūn'.
I take this rattle.
[The rattle is used when administering medicine.]

Wi-wa'-ba-mi'na hē'-na ko'-ni-a'-ni, ka',
ko'-ni-a'-ho-nā', nī', kā'.
See how I shine in making medicine.
[The speaker likens himself to the Makwa' Man'idō, one of the most powerful Midē' spirits. His body shines as if it were ablaze with light—due to magic power.]

This song is sung ad libitum according to the inspired condition of the person singing it. Many of the words are archaic, and differ from the modern forms.

Then the officiating priests arise and the one lowest in rank grasps his Midē' sack and goes through the gestures, described in connection with the previous degrees, of shooting into the joints and forehead of the candidate the sacred mī'gis. At the attempt made by the chief priest the candidate falls forward apparently unconscious. The priests then touch his joints and forehead with the upper end of their Midē' sacks whereupon he recovers and rises to a standing posture. The chief then addresses him and enjoins him to conduct himself with propriety and in accordance with the dignity of his profession. The following is the text, viz: Gi-gan'-bis-sĭn dau'-gē-in'-ni-nân' kish-bin'-bish-in dau'-o-ân-nĭn da'-ki-ka-wa'-bĭ-kwe ga'-kĭ-ne ke-ke'-wi-bi'-na-mōn ki-ma'-dzhĭ-zhi we'-bĭ-zi-wĭn'.

The translation is as follows: "You heed to what I say to you; if you are listening and will do what is right you will live to have white hair. That is all; you will do away with all bad actions."

The Midē priest second in rank then says to the candidate: Ke'-go-wi'-ka-za'-gi-to-wa'-kin ki-da'-no-ka'tshĭ-gân kai-ē'-gi-gīt' a-sē'-ma, kai'-e-mī'-dzĭm, which signifies: "Never begrudge your goods, neither your tobacco, nor your provisions." To this the candidate responds ē^{n}'—yes, by this signifying that he will never regret what he has given the Midē' for their services. The candidate remains standing while the members of the society take seats, after which he goes to the pile of blankets, skins, and other presents, and upon selecting appropriate ones for the officiating priests he carries them to those persons, after which he makes presents of less value to all other Midē' present. Tobacco is then distributed, and while all are preparing to make an offering to Ki'tshi Man'idō of tobacco, the

newly accepted member goes around to each member present, passes his hands downward over the sides of the Midē′'s head and says:

Mi-gwĕtsh′ ga′shi-tō′-win bi-ma′-dĭ-ni-wĭn′,
Thanks for giving to me life,

then, stepping back, he clasps his hands and bows toward the Midē′, adding: Ni-ka′-ni, ni-ka′-ni, ni-ka′-ni, ka-na′,—"My Midē′ friend, my Midē′ friend, my Midē′ friend, friend." To this the Midē′ responds in affirmation, hau′, ē^{n}′—yes.

The new member then finds a seat on the southern side of the inclosure, whereupon the ushers—Midē′ appointed to attend to outside duties—retire and bring in the vessels of food which are carried around to various persons present, four distinct times.

The feast continues for a considerable length of time, after which the kettles and dishes are again carried outside the Midē′wi-gân, when all who desire indulge in smoking. Midē′ songs are chanted by one of the priests, the accompanying, reproduced pictorially in Pl. XIV C, being an example. The lines, as usual, are repeated ad libitum, the music being limited to but few notes, and in a minor key. The following are the words with translation:

He′-ne-wi′-a ni′-na mi′-si-man′-i-dē-ge′ he-wa′-we-a′-ne-
Their bodies shine over the world unto me as unto you, my Midē′

kan′.
friend.

[This refers to the sun, and moon, whose bodies are united in the drawing.]

Ma′-na-wi-na′ hai′-e-ne-hā′ be-wa′-bik-kun kan-din′-a-we.
Your eyes see them both eyes made of iron, piercing eyes.

[The figure is that of the crane, whose loud, far-reaching voice is indicated by the short lines radiating from the mouth. The eyes of the crane Man′idō are equally penetrating.]

Ta-be′-nĕ-wa′ he-shi-wa′, hā′ ma′-si-ni′-ni-he′-shi-wa′, hā′.
Calm it leads you to guides you to your food.

[Knowledge of superior powers gained through familiarity with the rites of the Midē′wiwin is here referred to. The figure points to the abode of Ki′tshi Man′idō; three short lines indicating three degrees in the Midē′wiwin, which the candidate has taken.]

Ha-nin′-di he-bik′-kĭn-he′ ma^{n}′-i-dō ni-kan′ wa-ba-nŭnk′,
Whence does he rise spirit Midē′ friend from the east,

mi-dē′-man′-i-dō wa-ba-nŭnk′.
midē′ man′idō from the east.

[The hand reaches up as in making the gesture for rising sun or day, the "sky lines" leaning to the left, or east; one making signs is always presumed to face the south, and signs referring to periods of day, sun, sunrise, etc., are made from the left side of the body.]

Rest.

Wa-dzhi-wan', wa-dzhi-wan'-na,
Wa-dahi-wan' ni-ka'-na-hē'.

There is a mountain, there is a mountain,
There is a mountain, my friends.

[The upright outline represents a mountain upon which a powerful Midē' is seated, symbolical of the distinction attainable by a Midē'.]

Wa'-bĕ-ku'ĕ-be-a', wa'-bĕ-ku'-ĕ-be-a',
Shot it was, shot it was

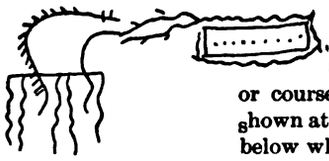
na'-bĕ-ku'-ĕ-be-a' man'-i-dō'-'a nĭn-dē'.
and it hit body, your man'idō your heart.

man'-i-dō'-a nin-dē'.
man'idō your heart.

[The Mī'gis is represented in the illustration by the small rings; the arrow indicating that it was "shot" with velocity.]

Hwe'-kwo-nin'-na-ta, ki-wī'-kash'-ka-man;
En-do'-ge-mā' wesh'-in-ē'.

What am I going around?
I am going around the Midē'wigân.



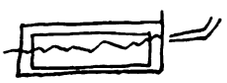
[The oblong structure represents the Midē'wigân. The otter-skin Midē' sack is taken around it, as is shown by the outline of that animal and the line or course indicated. The Makwa' Man'idō (bear spirit) is shown at the left, resting upon the horizontal line, the earth, below which are magic lines showing his power, as also the lines upon the back of the bear. The speaker compares himself to the bear spirit.]

Nen'-do-ne'-ha-mān-ni' nī'-ŏ,
What am I looking at.

[The figure denotes a leg, signifying powers of transporting one's self to remote places; the magic power is indicated by the three transverse lines and the small spots, the mī'gis, upon it.]

Ba'bin-ke'-en non'-do-wa-wē', hī',
I soon heard him, the one who
did not listen to them.

[The Midē', as a superior personage, is shown by having the horns attached to the head. The line of hearing has small rings, at intervals, indicating that something is heard.]



Hin'-ta-na'-wi ni-ka'-na-gi', ē', hē',
pi'-na-nī', hin'-ta-na'-wi ni-ka'-na-ga' na'-ge-ka-na' ē', hē'.
The Nika'ni are finding fault with me, inside of my lodge.

[The arm at the side of the Midē'wigân points to the interior, the place spoken of.]

O^{a}sh'-ko^{a}sh-na-nā' pi-na'-wa ni^{a}-bosh'-i-na'-na.
With the bear's claws I almost hit him.

[The Midē' used the bear's claw to work a charm, or exorcism, and would seem to indicate that he claimed the powers of a Wâbĕnō'. The one spoken of is an evil man'idō, referred to in the preceding line, in which he speaks of having heard him.]

At the conclusion of this protracted ceremony a few speeches may be made by a Midē', recounting the benefits to be enjoyed and the powers wielded by the knowledge thus acquired, after which the chief priest intimates to his colleagues the advisability of adjourning. They then leave the Midē'wigân by the western door, and before night all movable accessories are taken away from the structure.

The remainder of the evening is spent in visiting friends, dancing, etc., and upon the following day they all return to their respective homes.

DESCRIPTIVE NOTES.

Although the mī'gis shell of the several degrees is generally of the same species, some of the older Midē' priests claim that there were formerly specific shells, each being characteristic and pertaining specially to each individual grade. The objects claimed by Sika's-sigĕ as referring to the third degree are, in addition to the Cypræa monata, L., a piece of purple wampum, and one shell of elongated form, both shown on Pl. XI, Nos. 3 and 5, respectively.

The fact of a Midē' having been subjected to "mī'gis shooting" for the third time is an all-sufficient reason to the Indian why his powers are in a corresponding manner augmented. His powers of exorcism and incantation are greater; his knowledge and use of magic medicines more extended and certain of effect; and his ability to do harm, as in the capacity of a Wâbĕnō', is more and more lauded and feared. He becomes possessed of a greater power in prophecy and prevision, and in this state enters the class of personages known as the Jĕs'sakkīd', or jugglers. His power over darkness and obscurity is indicated on Pl. III, A, No. 77, upon which the head, chest, and arms are represented as being covered with lines to designate obscurity, the extended arms with outstretched hands denoting ability to grasp and control that which is hidden to the eye.

The Jĕs'sakkīd' and his manner of performing have already been mentioned. This class of sorcerers were met with by the Jesuit Fathers early in the seventeenth century, and referred to under various designations, such as jongleur, magicien, consulteur du manitou, etc. Their influence in the tribe was recognized, and formed one of the greatest obstacles encountered in the Christianization of the Indians. Although the Jĕs'sakkīd' may be a seer and prophet as well as a practitioner of exorcism without becoming a

member of the Midē'wiwin, it is only when a Midē' attains the rank of the third degree that he begins to give evidence of, or pretends to exhibit with any degree of confidence, the powers accredited to theformer.

FIG. 26. Jĕs'sakkân' or juggler's lodge.

The structure erected and occupied by the Jĕs'sakkīd' for the performance of his powers as prophet or oracle has before been described as cylindrical, being made by planting four or more poles and wrapping about them sheets of birch bark, blankets, or similar material that will serve as a covering. This form of structure is generally represented in pictographic records, as shown in Fig. 26.

The accompanying illustrations, Figs. 27, 28, and 29, reproduced from birch-bark etchings, were the property of Jĕs'sakkīd', who were

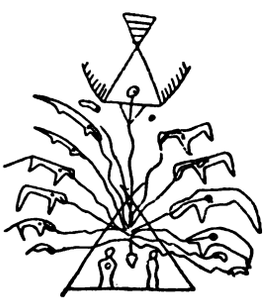


FIG. 27. Jĕs'sakkân', or juggler's lodge.

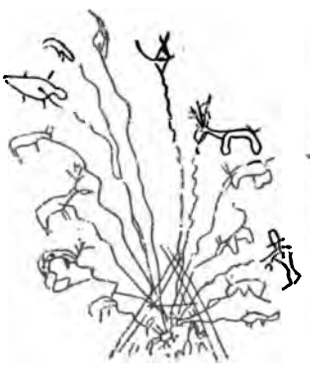


FIG. 28. Jĕs'sakkân', or juggler's lodge.

FIG. 29. Jĕs'sakkân', or juggler's lodge.

also Midē' of the third and fourth degrees. It will be noticed that the structure used by them is in the form of the ordinary wig'iwam, as their profession of medical magic is apparently held in higher esteem than the art of prophecy; their status and claims as Jĕs'sakkīd' being indicated by the great number of ma'nidōs which they have the power of invoking. These man'idos, or spirits, are indicated by the outline of their material forms, the heart being indicated and connected with the interior of the structure to show the power of the Jĕs'sakkīd' over the life of the respective spirits. The Thunder-bird usually occupies the highest position in his estimation, and for this reason is drawn directly over the wig'iwam. The Turtle is claimed to be the man'idō who acts as intermediary between the Jĕs'sakkīd' and the other man'idōs, and is therefore not found among the characters on the outside of the wig'iwam, but his presence is indicated within, either at the spot marking the convergence of the "life lines," or immediately below it. Fig. 30 is a reproducton of an

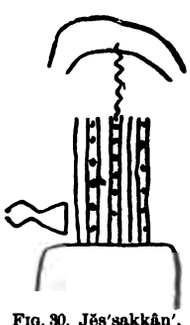


FIG. 30. Jĕs'sakkân', or juggler's lodge.

etching made by a Jĕs'sakkīd' at White Earth, Minnesota. The two curved lines above the Jĕs'sakkan' represent the sky, from which magic power is derived, as shown by the waving line extending downward. The small spots within the structure are "magic spots," i. e., the presence of man'idōs. The juggler is shown upon the left side near the base. When a prophet is so fortunate as to be able to claim one of these man'idōs as his own tutelary daimon, his advantage in invoking the others is comparatively greater. Before proceeding to the Jĕs'sakkân'—or the "Jugglery," as the Jĕs'sakkīd' wig'iwam is commonly designated, a prophet will prepare himself by smoking and making an offering to his man'idō, and by singing a chant, of which an example is presented on Pl. XIV, D. It is a reproduction of one made by a Jĕs'sakkīd' who was also a Midē' of the third degree. Each line is chanted as often as may be desired, or according to the effect which it may be desirable to produce or the inspired state of the singer.

Me-we'-yan, ha', ha', ha',

I go into the Jĕs'sakkan' to see the medicine.

[The circle represents the Jĕs'sakkīd' as viewed from above; the short lines denote the magic character of the structure, and the central ring, or spot, the magic stone used by the prophet who appears entering from the side.]

Tschi-nun'-dōn', he', he', he', he',

I was the one who dug up life.

[The Otter Man'idō emerging from the Midē'wigân; he received it from Ki'tshi Mani'dō.]

Ni'ka-nī' we-do-ko^{a}'-a, ha', ha',

The spirit put down medicine on earth to grow.

[The sacred or magic lines descending to the earth denote supernatural origin of the mī'gis, which is shown by the four small rings. The short lines at the bottom represent the ascending sprouts of magic plants.]

Te-ti-ba'-tshi mŭt'-â-wit', tē', hē', hē',

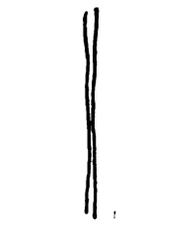
I am the one that dug up the medicine.

[The otter shown emerging from the jugglery. The speaker represents himself "like unto the Otter Man'idō."]

Ki'wa^{a}-win'-da ma'-kwa-nan', na', ha',

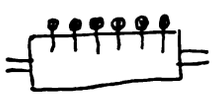
I answer my brother spirit.

[The Otter Man'idō responds to the invocation of the speaker. The diagonal line across the body signifies the "spirit character" of the animal.]

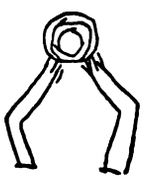


Rest or pause.

Wa'-a-so'-at wĕn'-ti'-na-man, ha,' ha,
The spirit has put life into my body.
[The speaker is represented as being in the Midē'-wigân, where Ki'tshi Man'idō placed magic power into his body; the arms denote this act of putting into his sides the mī'gis. The line crossing the body denotes the person to be possessed of supernatural power.]



Ki-to'-na-bi'-in, nē', hē', hē',
This is what the medicine has given us.
[The Midē'wigân, showing on the upper line the guardian man'idōs.]



Ni'-sha-we'-ni-bĭ-ku', hū', hū', hē',
I took with two hands what was thrown down to us.
[The speaker grasped life, i. e., the migis', to secure the mysterious power which he professes.]

In addition to the practice of medical magic, the Jĕs'sakkīd' sometimes resorts to a curious process to extract from the patient's body the malevolent beings or man'idōs which cause disease. The method of procedure is as follows: The Jĕs'sakkīd' is provided with four or more tubular bones, consisting of the leg bones of large birds, each of the thickness of a finger and 4 or 5 inches in length. After the priest has fasted and chanted prayers for success, he gets down upon all fours close to the patient and with his mouth near the affected part. After using the rattle and singing most vociferously to cause the evil man'idō to take shelter at some particular spot, so that it may be detected and located by him, he suddenly touches that place with the end of one of the bones and immediately thereafter putting the other end into his mouth, as if it were a cigar, strikes it with the flat hand and sends it apparently down his throat. Then the second bone is treated in the same manner, as also the third and fourth, the last one being permitted to protrude from the mouth, when the end is put against the affected part and sucking is indulged in amid the most violent writhings and contortions in his endeavors to extract the man'idō. As this object is supposed to have been reached and swallowed by the Jĕs'sakkīd' he crawls away to a short distance from the patient and relieves himself of the demon with violent

retchings and apparent suffering. He recovers in a short time, spits out the bones, and, after directing his patient what further medicine to swallow, receives his fee and departs. Further description of this practice will be referred to below and illustrated on Pl. xviii.

The above manner of disposing of the hollow bones is a clever trick and not readily detected, and it is only by such acts of jugglery and other delusions that he maintains his influence and importance among the credulous.

Fig. 31 represents a Jĕs'sakkīd' curing a sick woman by sucking the demon through a bone tube. The pictograph was drawn upon a piece of birch bark which was carried in the owner's Midē' sack, and was intended to record an event of importance.

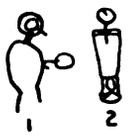


FIG. 31. Jĕs'-sakkīd' curing woman.

No. 1 represents the actor, holding a rattle in hand. Around his head is an additional circle, denoting quantity (literally, more than an ordinary amount of knowledge), the short line projecting to the right indicating the tube used.

No. 2 is the woman operated upon.

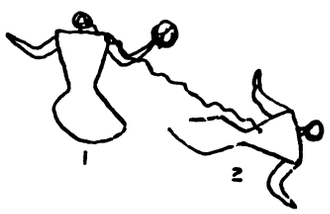


FIG. 32. Jĕs'sakkīd' curing man.

Fig. 32 represents an exhibition by a Jĕs'sakkīd', a resident of White Earth, Minnesota. The priest is shown in No. 1 holding his rattle, the line extending from his eye to the patient's abdomen signifying that he has located the demon and is about to begin his exorcism. No. 2 is the patient lying before the operator.

FOURTH DEGREE.

The Midē'wigân, in which this degree is conferred, differs from the preceding structures by having open doorways in both the northern and southern walls, about midway between the eastern and western extremities and opposite to one another. Fig. 33 represents a ground plan, in which may also be observed the location of each of the four Midē' posts. Fig. 34 shows general view of same structure. A short distance from the eastern entrance is deposited the sacred stone, beyond which is an area reserved for the presents to be deposited by an applicant for initiation. The remaining two-thirds of the space toward the western door is occupied at regular intervals by four posts, the first being painted red with a band of green around the top. (Pl. xv, No. 1.) The second post is red, and has scattered over its surface spots of white clay to symbolize

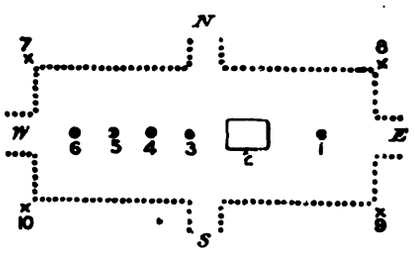


FIG. 33. Diagram of Midē'wigân of the fourth degree.

the sacred mī'gis shell. Upon it is perched the stuffed skin of an owl—kŏ-kó-kŏ-ō'. (Pl. xv, No. 2.) The third post is black; but instead of being round is cut square. (Pl. xv, No. 3.) The fourth post, that nearest the western extremity, is in the shape of a cross, painted

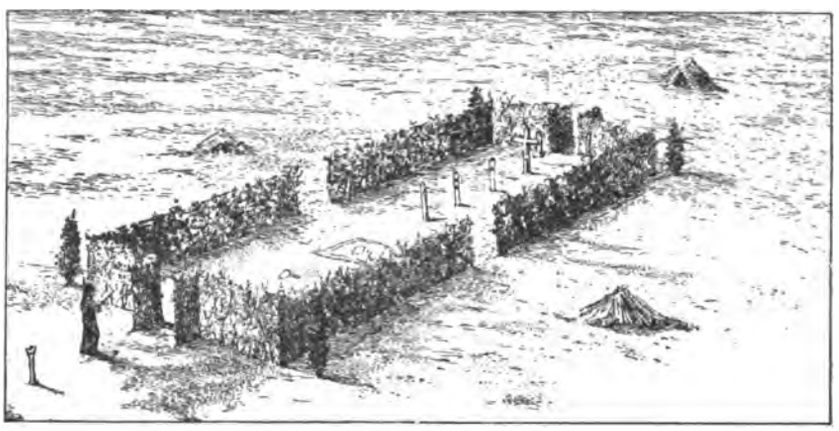


Fig. 34. General view of Midē wigân.

white, with red spots, excepting the lower half of the trunk, which is squared, the colors upon the four sides being white on the east, green on the south, red on the west, and black on the north. (Pl. xv, No. 4.)

About 10 paces east of the main entrance, in a direct line between it and the sweat lodge, is planted a piece of thin board 3 feet high and 6 inches broad, the top of which is cut so as to present a three-lobed apex, as shown in Fig. 3. The eastern side of this board is painted green; that facing the Midē'wigân red. Near the top is a small opening, through which the Midē' are enabled to peep into the interior of the sacred structure to observe the angry man'idōs occupying the structure and opposing the intrusion of anyone not of the fourth degree.

A cedar tree is planted at each of the outer corners of the Midē'-wigân, and about 6 paces away from the northern, western, and southern entrances a small brush structure is erected, sufficiently large to admit the body. These structures are termed bears' nests, supposed to be points where the Bear Man'idō rested during the struggle he passed through while fighting with the malevolent man'idōs within to gain entrance and receive the fourth-degree initiation. Immediately within and to either side of the east and west entrances is planted a short post, 5 feet high and 8 inches thick, painted red upon the side facing the interior and black upon the reverse, at the base of each being laid a stone about as large as a human head. These four posts represent the four limbs and feet of the Bear Man'idō, who made the four entrances and forcibly entered and expelled the evil beings who had opposed him. The fourth-degree Midē' post—

the cross—furthermore symbolizes the four days' struggle at the four openings or doors in the north, south, east, and west walls of the structure.

PREPARATION OF CANDIDATE.

Under ordinary circumstances it requires at least one year before a Midē' of the third grade is considered eligible for promotion, and it is seldom that a candidate can procure the necessary presents within that period, so that frequently a number of years elapse before any intimation by a candidate is made to the chief priest that the necessary requirements can be complied with. The chief reason of this delay is attributed to the fact that the fee to the officiating priests alone must equal in value and quantity four times the amount paid at the first initiation, and as the success in gathering the robes, skins, blankets, etc., depends upon the candidate's own exertions it will readily appear why so few ever attain the distinction sought. Should one be so fortunate, however, as to possess the required articles, he has only to make known the fact to the chief and assistant Midē' priests, when a meeting is held at the wig'iwam of one of the members and the merits of the candidate discussed. For this purpose tobacco is furnished by the candidate. The more valuable and more numerous the presents the more rapidly will his application be disposed of, and the more certainly will favorable consideration on it be had. It becomes necessary, as in former instances of preparation, for the candidate to procure the service of a renowned Midē', in order to acquire new or specially celebrated remedies or charms. The candidate may also give evidence of his own proficiency in magic without revealing the secrets of his success or the course pursued to attain it. The greater the mystery the higher he is held in esteem even by his jealous confrères.

There is not much to be gained by preparatory instruction for the fourth degree, the chief claims being a renewal of the ceremony of "shooting the mī'gis" into the body of the candidate, and enacting or dramatizing the traditional efforts of the Bear Man'idō in his endeavor to receive from the Otter the secrets of this grade. One who succeeds becomes correspondingly powerful in his profession and therefore more feared by the credulous. His sources of income are accordingly increased by the greater number of Indians who require his assistance. Hunters, warriors, and lovers have occasion to call upon him, and sometimes antidoting charms are sought, when the evil effects of an enemy's work are to be counteracted.

The instructor receives the visit of the candidate, and upon coming to a satisfactory agreement concerning the fee to be paid for the service he prepares his pupil by prompting him as to the part he is to enact during the initiation and the reasons therefor. The preparation and the merits of magic compounds are discussed, and

the pupil receives instruction in making effective charms, compounding love powder, etc. This love powder is held in high esteem, and its composition is held a profound secret, to be transmitted only when a great fee is paid. It consists of the following ingredients: Vermilion; powdered snakeroot (Polygala senega, L.); exiguam particulam sanguinis a puella effusi, quum in primis menstruis esset; and a piece of ginseng cut from the bifurcation of the root, and powdered. These are mixed and put into a small buckskin bag. The preparation is undertaken only after an offering to Ki'tshi Man'idō of tobacco and a Midē' song with rattle accompaniment. The manner of using this powder will be described under the caption of "descriptive notes." It differs entirely from the powder employed in painting the face by one who wishes to attract or fascinate the object of his or her devotion. The latter is referred to by the Rev. Peter Jones[1] as follows:

> There is a particular kind of charm which they use when they wish to obtain the object of their affections. It is made of roots and red ocher. With this they paint their faces, believing it to possess a power so irresistible as to cause the object of their desire to love them. But the moment this medicine is taken away and the charm withdrawn the person who before was almost frantic with love hates with a perfect hatred.

It is necessary that the candidate take a sweat-bath once each day, for four successive days, at some time during the autumn months of the year preceding the year in which the initiation is to occur. This form of preparation is deemed agreeable to Ki'tshi Man'idō, whose favor is constantly invoked that the candidate may be favored with the powers supposed to be conferred in the last degree. As spring approaches the candidate makes occasional presents of tobacco to the chief priest and his assistants, and when the period of the annual ceremony approaches, they send out runners to members to solicit their presence, and, if of the fourth degree, their assistance.

INITIATION OF CANDIDATE.

The candidate removes to the vicinity of the Midē'wigân so as to be able to go through the ceremony of purgation four times before the day of initiation. The sudatory having been constructed on the usual site, east of the large structure, he enters it on the morning of the fifth day preceding the initiation and after taking a sweat-bath he is joined by the preceptor, when both proceed to the four entrances of the Midē'wigân and deposit at each a small offering of tobacco. This procedure is followed on the second and third days, also, but upon the fourth the presents are also carried along and deposited at the entrances, where they are received by assistants and suspended from the rafters of the interior. On the evening of the last day, the chief and officiating priests visit the candidate and his preceptor,

[1] Hist. of the Ojebway Indians. London [1843?], p. 155.

in the sweat-lodge, when ceremonial smoking is indulged in followed by the recitation of Midē′ chants. The following (Pl. XVI, A) is a reproduction of the chant taught to and recited by the candidate. The original was obtained from an old mnemonic chart in use at Mille Lacs, Minnesota, in the year 1825, which in turn had been copied from a record in the possession of a Midē′ priest at La Pointe, Wisconsin. Many of the words are of an older form than those in use at the present day. Each line may be repeated ad libitum.

Ni-ka′-ni-na′, ni-ka′-ni-na′, ni-ka′-ni-na′,
I am the Nika′ni, I am the Nika′ni, I am the Nika′ni,
man′-i-dō wig′-i-wam win′-di-ge′-un.
I am going into the sacred lodge.

[The speaker compares himself to the Bear Man′ido, and as such is represented at the entrance of the Midē′wigân.]

Ni-ka′-ni-na′, ni-ka′-ni-na′, ni-ka′-ni-na′,
I am the Nika′ni, I am the Nika′ni, I am the Nika′ni,
ni-kan′-gi-nun′-da wé-mĭ-dŭk′.
I "suppose" you hear me.

[The lines from the ear denotes hearing; the words are addressed to his auditors.]

Wâ′, he-wa′-ke-wa ke-wâ′, he-wa′-ke-wâ′, wâ′.
He said, he said.

[Signifies that Ki′tshi Man′idō, who is seen with the voice lines issuing from the mouth, and who promised the Ani′shinâ′bēg "life," that they might always live.]

Rest. A ceremonial smoke is now indulged in.

We′-shki-nun′-do-ni-ne′,
ke-nosh′-ki-nun′-do-ni-ne′.
This is the first time you hear it.

[The lines of hearing are again shown; the words refer to the first time this is chanted as it is an intimation that the singer is to be advanced to the higher grade of the Midē′wiwin.]

Hwe′-na-ni-ka he-na′, he-nō′
mi-tē′-wi^{n}-wi^{n}′ gi′-ga-wa′-pi-no-dōn′.
You laugh, you laugh at the "grand medicine."

[The arms are directed towards Ki′tshi Man′idō, the creator of the sacred rite; the words refer to those who are ignorant of the Midē′wiwin and its teachings.]

Nun-te′-ma-ne′, hē′, wi′-na-nun′-te-ma-ne′
ki′-pi-nan′.
I hear, but they hear it not.

[The speaker intimates that he realizes the importance of the Midē′ rite, but the uninitiated do not.]

Pe'-ne-sŭi'-a ke'-ke-kwi'-yan.
I am sitting like a sparrow-hawk.
[The singer is sitting upright, and is watchful, like a hawk watching for its prey. He is ready to observe, and to acquire, everything that may transpire in the Midē' structure.]

Upon the conclusion of the chant, the assembled Midē' smoke and review the manner of procedure for the morrow's ceremony, and when these details have been settled they disperse, to return to their wig'i-wams, or to visit Midē' who may have come from distant settlements.

Early on the day of his initiation the candidate returns to the sudatory to await the coming of his preceptor. The gifts of tobacco are divided into parcels which may thus be easily distributed at the proper time, and as soon as the officiating priests have arrived, and seated themselves, the candidate produces some tobacco of which all present take a pipeful, when a ceremonial smoke-offering is made to Ki'tshi Man'idō. The candidate then takes his midē' drum and sings a song of his own composition, or one which he may have purchased from his preceptor, or some Midē' priest. The following is a reproduction of an old mnemonic song which the owner, Sikas'sigĕ, had received from his father who in turn had obtained it at La Pointe, Wisconsin, about the year 1800. The words are archaic to a great extent, and they furthermore differ from the modern language on account of the manner in which they are pronounced in chanting, which peculiarity has been faithfully followed below. The pictographic characters are reproduced in Pl. XVI, B. As usual, the several lines are sung ad libitum, repetition depending entirely upon the feelings of the singer.

Hin'-to-nâ-ga-ne' o-sa-ga-tahĭ'-wĕd o-do'-zhi-tōn'.
The sun is coming up, that makes my dish.
[The dish signifies the feast to be made by the singer. The zigzag lines across the dish denote the sacred character of the feast. The upper lines are the arm holding the vessel.]

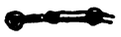
Man'-i-dō i'-ya-nē', ish'-ko-te'-wi-wa'-we-yan'.
My spirit is on fire.
[The horizontal lines across the leg signify magic power of traversing space. The short lines below the foot denote flames, i. e., magic influence obtained by swiftness of communication with the man'idōs.]

Ko'tshi-hâ-ya-nē', nē',
ish'-ki-to'-ya-nĭ', nin-do'-we-hē', wi'-a-we-yan'.
I want to try you, I am of fire.
[The zigzag lines diverging from the mouth signify voice, singing; the apex upon the head superior knowledge, by means of which the singer wishes to try his Midē' sack upon his hearer, to give evidence of the power of his influence.]

A pause. Ceremonial smoking is indulged in, after which the chant is continued.

Ni-mī'-ga-sim'-ma man'-i-dō, sa-ko'-tshi-na'.
My mī'gis spirit, that is why I am stronger than you.
[The three spots denote the three times the singer has received the mī'gis by being shot; it is because this spirit is within him that he is more powerful than those upon the outside of the wigiwam who hear him.]

Mī'-ga-ye'-nin en'-dy-ân, ya', hō', ya', man'-i-dō'-ya.
That is the way I feel, spirit.
[The speaker is filled with joy at his power, the mī'gis within him, shown by the spot upon the body, making him confident.]



Ya-gō'-sha-hī', nâ', ha', ha',
Ya-gō'-sha-hi', man'-i-dō-wī'-yin.
I am stronger than you, spirit that you are.
[He feels more powerful, from having received three times the mī'gis, than the evil spirit who antagonizes his progress in advancement.]

Upon the completion of this preliminary by the candidate, the priests emerge from the wig'iwam and fall in line according to their official status, when the candidate and preceptor gather up the parcels of tobacco and place themselves at the head of the column and start toward the eastern entrance of the Midē'wigân. As they approach the lone post, or board, the candidate halts, when the priests continue to chant and drum upon the Midē' drum. The chief Midē' then advances to the board and peeps through the orifice near the top to view malevolent man'idōs occupying the interior, who are antagonistic to the entrance of a stranger. This spot is assumed to represent the resting place or "nest," from which the Bear Man'idō viewed the evil spirits during the time of his initiation by the Otter. The evil spirits within are crouching upon the floor, one behind the other and facing the east, the first being Mi-shi'-bi-shi'—the panther; the second, Me-shi'-kĕ—the turtle; the third, kwin'-go-â'-gĭ—the big wolverine; the fourth, wâ'-gŭsh—the fox; the fifth, ma-in'-gŭn—the wolf; and the sixth, ma-kwa'—the bear. They are the ones who endeavor to counteract or destroy the good wrought by the rites of the Midē'wiwin, and only by the aid of the good man'idōs can they be driven from the Midē'wigân so as to permit a candidate to enter and receive the benefits of the degree. The second Midē' then views the group of malevolent beings, after which the third, and lastly the fourth priest looks through the orifice. They then advise

the presentation by the candidate of tobacco at that point to invoke the best efforts of the Midē' Man'idōs in his behalf.

It is asserted that all of the malevolent man'idōs who occupied and surrounded the preceding degree structures have now assembled about this fourth degree of the Midē'wigân to make a final effort against the admission and advancement of the candidate; therefore he impersonates the good Bear Man'idō, and is obliged to follow a similar course in approaching from his present position the entrance of the structure. Upon hands and knees he slowly crawls toward the main entrance, when a wailing voice is heard in the east which sounds like the word hāⁿ', prolonged in a monotone. This is ge'-gi-si'-bi-ga'-ne-dât man'idō. His bones are heard rattling as he approaches; he wields his bow and arrow; his long hair streaming in the air, and his body, covered with mī'gis shells from the salt sea, from which he has emerged to aid in the expulsion of the opposing spirits. This being the information given to the candidate he assumes and personates the character of the man'idō referred to, and being given a bow and four arrows, and under the guidance of his preceptor, he proceeds toward the main entrance of the structure while the officiating priests enter and station themselves within the door facing the west. The preceptor carries the remaining parcels of tobacco, and when the candidate arrives near the door he makes four movements with his bow and arrow toward the interior, as if shooting, the last time sending an arrow within, upon which the grinning spirits are forced to retreat toward the other end of the inclosure. The candidate then rushes in at the main entrance, and upon emerging at the south suddenly turns and again employs his bow and arrow four times toward the crowd of evil man'idōs, who have rushed toward him during the interval that he was within. At the last gesture of shooting into the inclosure, he sends forward an arrow, deposits a parcel of tobacco and crouches to rest at the so-called "bear's nest." During this period of repose the Midē' priests continue to drum and sing. Then the candidate approaches the southern door again, on all fours, and the moment he arrives there he rises and is hurried through the inclosure to emerge at the west, where he turns suddenly, and imitating the manner of shooting arrows into the group of angry man'idōs within, he at the fourth movement lets fly an arrow and gets down into the western "bear's nest." After a short interval he again approaches the door, crawling forward on his hands and knees until he reaches the entrance, where he leaves a present of tobacco and is hastened through the inclosure to emerge at the northern door, where he again turns suddenly upon the angry spirits, and after making threatening movements toward them, at the fourth menace he sends an arrow among them. The spirits are now greatly annoyed by the magic power possessed by the candidate and the assistance rendered by the Midē'

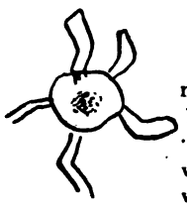
Man'idōs, so that they are compelled to seek safety in flight. The candidate is resting in the northern "bear's nest," and as he again crawls toward the Midē'wigân, on hands and knees, he deposits another gift of a parcel of tobacco, then rises and is hurried through the interior to emerge at the entrance door, where he turns around, and seeing but a few angry man'idōs remaining, he takes his last arrow and aiming it at them makes four threatening gestures toward them, at the last sending the arrow into the structure, which puts to flight all opposition on the part of this host of man'idōs. The path is now clear, and after he deposits another gift of tobacco at the door he is led within, and the preceptor receives the bow and deposits it with the remaining tobacco upon the pile of blankets and robes that have by this time been removed from the rafters and laid upon the ground midway between the sacred Midē' stone and the first Midē' post.

The chief Midē' priest then takes charge of the candidate, saying:

Mi'-a-shi'-gwa wi-ka'-we-a'-kwa-mŭs-sin'-nŭk. Mi'-a-shi'-gwa wi-kan'-do-we-ân'
Now is the time [to take] the path that has no end. Now is the time I shall inform you [of]

mi'-ga-i'-zhĭd wen'-dzhi-bi-mâ'-dis.
that which I was told the reason I live.

To this the second Midē' priest remarks to the candidate, Wa'-shi-gân'-do-we-an' mi-gai'-i-nŏk' wa'-ka-no'-shi-dzin—which freely translated signifies: "The reason I now advise you is that you may heed him when he speaks to you." The candidate is then led around the interior of the inclosure, the assistant Midē' fall in line of march and are followed by all the others present, excepting the musicians. During the circuit, which is performed slowly, the chief Midē' drums upon the Midē' drum and chants. The following, reproduced from the original, on Pl. XVII, B, consists of a number of archaic words, some of which are furthermore different from the spoken language on account of their being chanted, and meaningless syllables introduced to prolong certain accentuated notes. Each line and stanza may be repeated ad libitum.



Man'-i-dō, hē', nē'-yē', man'-i-dō, hē', nē', yē',
ēn'-da-na'-bi-yĕn wen'-dō-bi'-yĕn
A spirit, a spirit, you who sit there, who sit there.

[The singer makes a spirit of the candidate by thus giving him new life, by again shooting into his body the sacred mĭ'gis. The lisk is the dish for feast of spirits in the dzhibai' midē'wigân—"Ghost Lodge," the arms reaching towards it denoting the spirits who take food therefrom. The signification is that the candidate will be enabled to invoke and commune with the spirits of departed Midē', and to learn of hidden powers.]

He'-ha-wa'-ni, yē', he'-ha-wa'-ni, yē',
na'-bi-nesh'-ga-na'-bi, hī', hē'.

[These words were chanted, while the following are those as spoken, apart from the music.]

Â-wan'-ō-de'-no-wĭn nī'-bi-dĕsh'-ka-wĭn un'-de-no'-wĭn.

The fog wind goes from place to place whence the wind blows.

[The reason of the representation of a human form was not satisfactorily explained. The preceptor felt confident, however, that it signified a man'idō who controls the fog, one different from one of the a-na'-mi-ki', or Thunderers, who would be shown by the figure of an eagle, or a hawk, when it would also denote the thunder, and perhaps lightning, neither of which occurs in connection with the fog.]

Rest.

Man'-i-dō'-we ni'-mi-nan' ku-ni'-ne man-to'-ke ni'-mi-ne'.

I who acknowledge you to be a spirit, and am dying.

[The figure is an outline of the Midē'wigân with the sacred Midē' stone indicated within, as also another spot to signify the place occupied by a sick person. The waving lines above and beneath the oblong square are magic lines, and indicate magic or supernatural power. The singer compares the candidate to a sick man who is seeking life by having shot into his body the mī'gis.]

Ga-kwe'-in-nân' tshi-ha'-gĕ-nâ' ma-kwa' ni-go'-tshi-ni'.

I am trying you who are the bear.

[The Midē' who is chanting is shown in the figure; his eyes are looking into the candidate's heart. The lines from the mouth are also shown as denoting speech, directed to his hearer. The horns are a representation of the manner of indicating superior powers.]

Pī-nē'-si ka'-ka-gī'-wai-yan' wen'-dzhi man'-i-dō'wid.

The bird, the crow bird's skin is the reason why I am a spirit.

[Although the crow is mentioned, the Thunder-bird (eaglè) is delineated. The signification of the phrase is, that the speaker is equal in power to a man'idō, at the time of using the Midē' sack—which is of such a skin.]

Tshin-gwe'-wi-he'-na nē', ka^{n}', tshi-wâ'-ba-ku-nēt'.

The sound of the Thunder is the white bear of fire.

[The head is, in this instance, symbolical of the white bear man'idō; the short lines below it denoting flame radiating from the body, the eyes also looking with penetrating gaze, as indicated by the double waving lines from each eye. The white bear man'idō is one of the most powerful man'idōs, and is so recognized.]

By the time this chant is completed the head of the procession reaches the point of departure, just within the eastern door, and all of the members return to their seats, only the four officiating Midē' remaining with the candidate and his preceptor. To search further

that no malevolent man'idōs may remain lurking within the Midē'-wigân, the chief priests lead the candidate in a zigzag manner to the western door, and back again to the east. In this way the path leads past the side of the Midē' stone, then right oblique to the north of the heap of presents, thence left oblique to the south of the first-degree post, then passing the second on the north, and so on until the last post is reached, around which the course continues, and back in a similar serpentine manner to the eastern door. The candidate is then led to the blankets, upon which he seats himself, the four officiating priests placing themselves before him, the preceptor standing back near the first of the four degree posts.

The Midē' priest of the fourth rank or place in order of precedence approaches the kneeling candidate and in a manner similar to that which has already been described shoots into his breast the mī'gis; the third, second and first Midē' follow in like manner, the last named alone shooting his mī'gis into the candidate's forehead, upon which he falls forward, spits out a mī'gis shell which he had previously secreted in his mouth, and upon the priests rubbing upon his back and limbs their Midē' sacks he recovers and resumes his sitting posture.

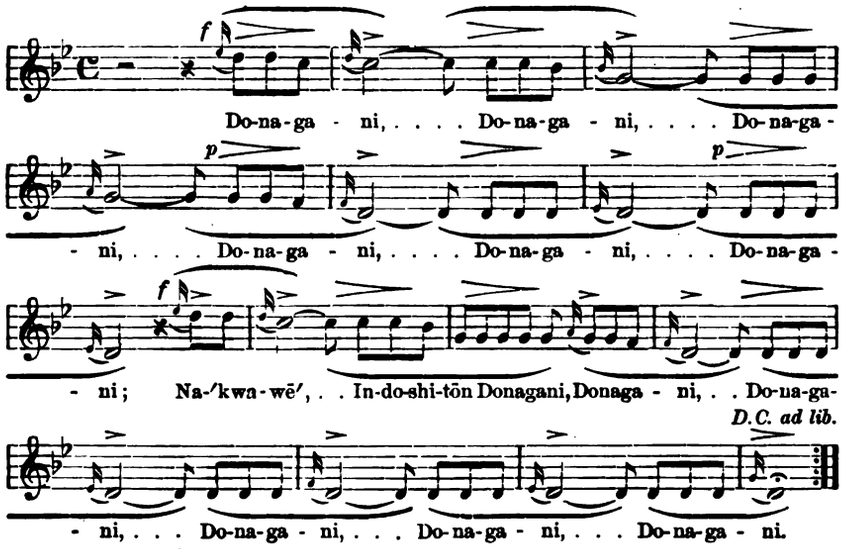
The officiating priests retire to either side of the inclosure to find seats, when the newly received member arises and with the assistance of the preceptor distributes the remaining parcels of tobacco, and lastly the blankets, robes, and other gifts. He then begins at the southeastern angle of the inclosure to return thanks for admission, places both hands upon the first person, and as he moves them downward over his hair says: Mi-gwĕtsh' ga-o'-shi-tŏ'-ĭn bi-mâ'-dĭ-sĭ-win—"Thanks, for giving to me life." The Midē' addressed bows his head and responds, hau', ē^{n}',—yes when the newly admitted member steps back one pace, clasps his hands and inclines his head to the front. This movement is continued until all present have been thanked, after which he takes a seat in the southeastern corner of the inclosure.

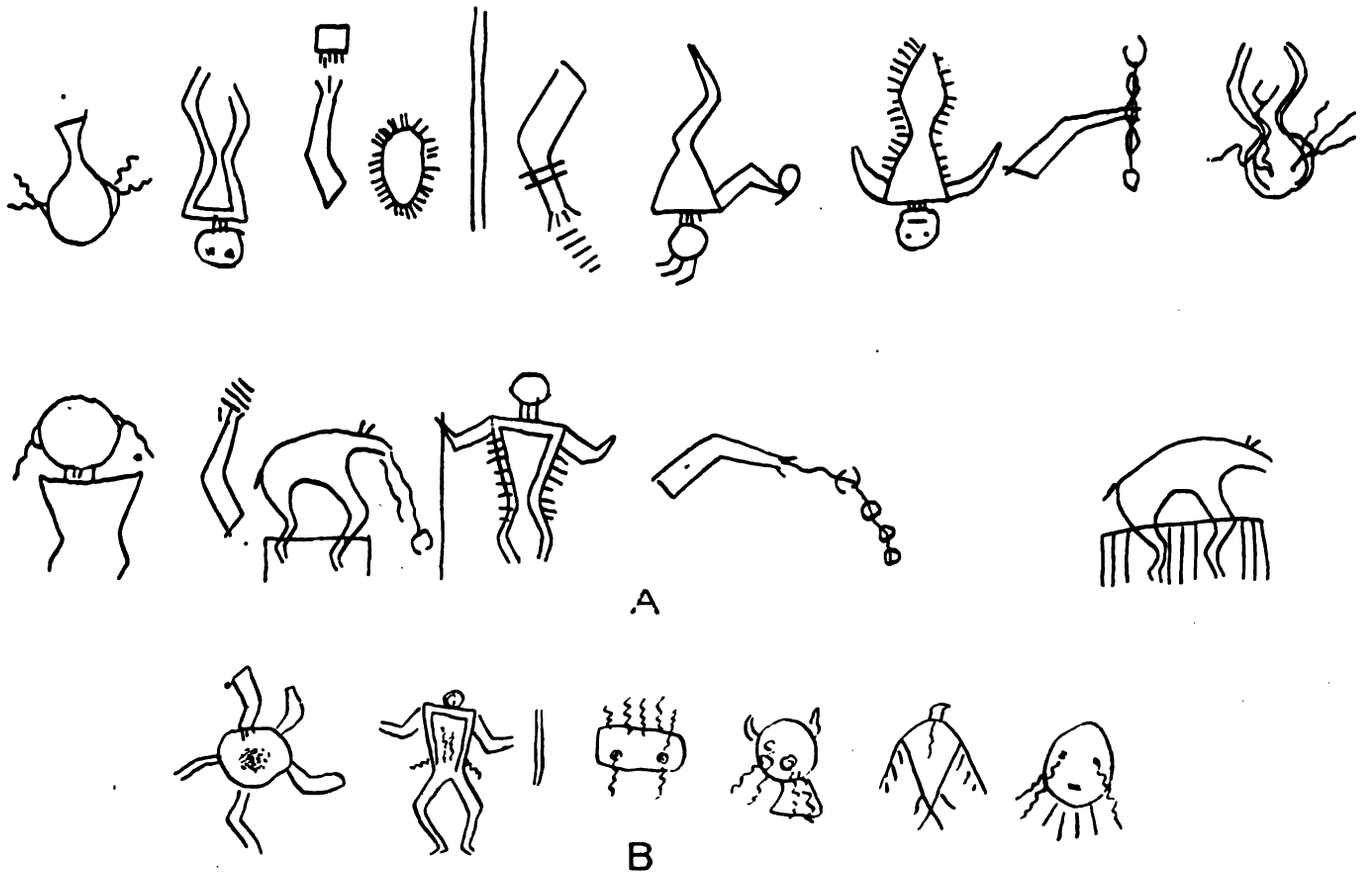
A curious ceremony then takes place in which all the Midē' on one side of the inclosure arise and approach those upon the other, each grasping his Midē' sack and selecting a victim pretends to shoot into his body the mī'gis, whereupon the Midē' so shot falls over, and after a brief attack of gagging and retching pretends to gain relief by spitting out of his mouth a mī'gis shell. This is held upon the left palm, and as the opposing party retreat to their seats, the side which has just been subjected to the attack moves rapidly around among one another as if dancing, but simply giving rapid utterance to the word hŏ', hŏ', hŏ', hŏ', hŏ', hŏ', and showing the mī'gis to everybody present, after which they place the flat hands quickly to the mouth and pretend again to swallow their respective shells. The members of this party then similarly attack their opponents, who

submit to similar treatment and go through like movements in exhibiting the mī'gis, which they again swallow. When quiet has been restored, and after a ceremonial smoke has been indulged in, the candidate sings, or chants, the production being either his own composition or that of some other person from whom it has been purchased. The chant presented herewith was obtained from Sikas'-sigĕ, who had received it in turn from his father when the latter was chief priest of the Midē'wiwin at Mille Lacs, Minnesota. The pictographic characters are reproduced on Pl. XVII, A, and the musical notation, which is also presented, was obtained during the period of my preliminary instruction. The phraseology of the chant, of which each line and verse is repeated ad libitum as the singer may be inspired, is as follows:

Do-nâ'-ga-nī', Na'-wa-kwe' in-do'-shi-tōn', do-nâ'-ga-nī'.
My dish, At noon I make it, my dish.

[The singer refers to the feast which he gives to the Midē' for admitting him into the Midē'wiwin.]

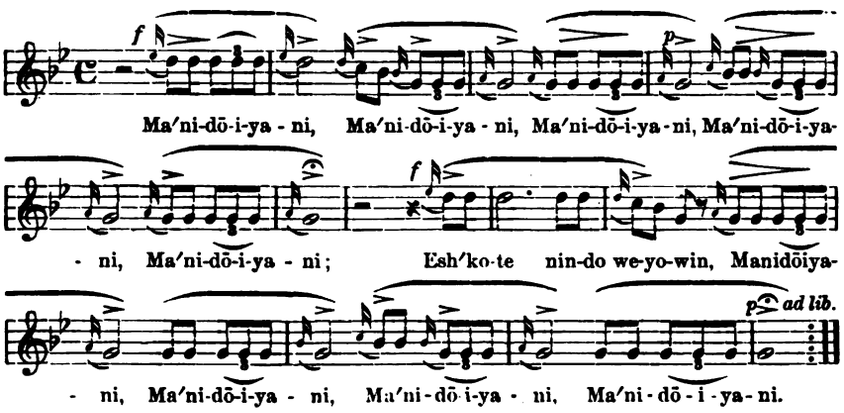


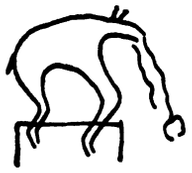


MNEMONIC SONGS.

Man'-i-dō' i-yan-nī', Esh-ko'-te nin'-do-we'-yo-wĭn'.
I am such a spirit, My body is made of fire.

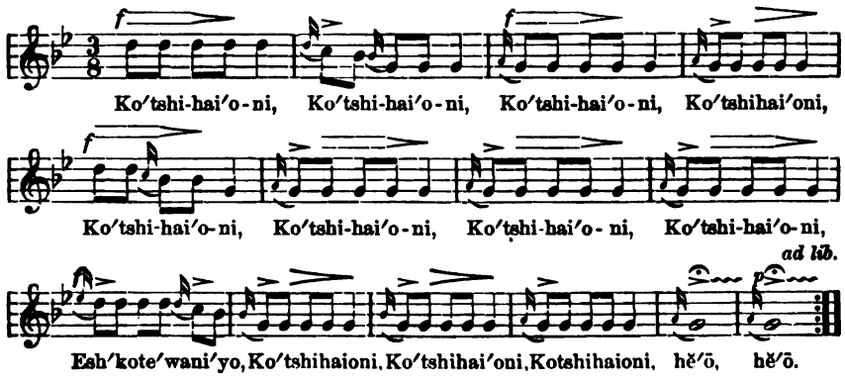
[His power reaches to the sky, i. e., he has power to invoke the aid of Ki'tshi Man'idō. The four degrees which he has received are indicated by the four short lines at the tip of the hand.]



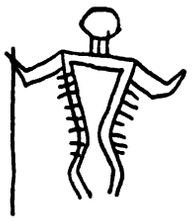


Kŏ'-tshi-hai'-o-nī', Esh-ko'-te wa-ni'-yō.
I have tried it, My body is of fire.

[He likens himself to the Bear Man'idō, and has like power by virtue of his mī'gis, which is shown below the lines running downward from the mouth. He is represented as standing in the Midē'wigân—where his feet rest.]

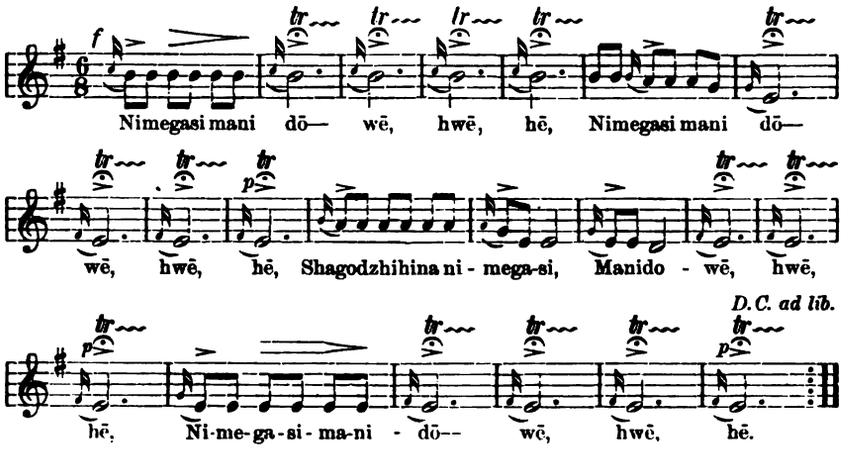


Pause. An offering of smoke is made to Ki'tshi Man'idō.



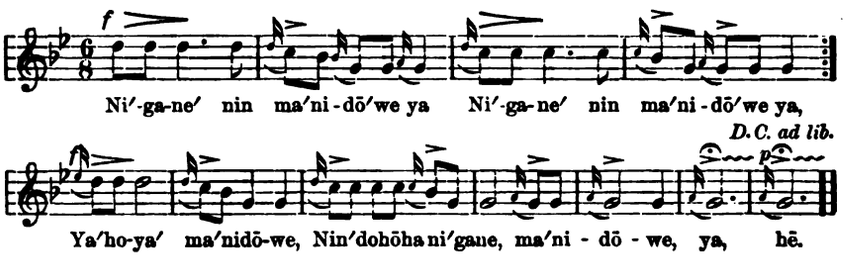
Ni-mī'-gi-sĭm' man'-i-dō'-we, hwē', hē',
Sha'-go-dzhĭ'-hi-na'.
My mī'gis spirit,
I overpower death with.

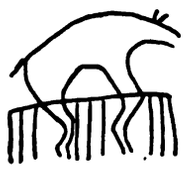
[His body is covered with mī'gis as shown by the short lines radiating from the sides, and by this power he is enabled to overcome death.]



Ni'-ka-ni' nin-man'-e-dō'-we-ya'.
Ya'-ho-ya' man'-i-dō'-wa nin-da'-ho-ha'.
That is the way with me, spirit that I am.

[The hand shows how he casts the mī'gis forward into the person requiring life. He has fourfold power, i. e., he has received the mī'gis four times himself and is thus enabled to infuse into the person requiring it.]

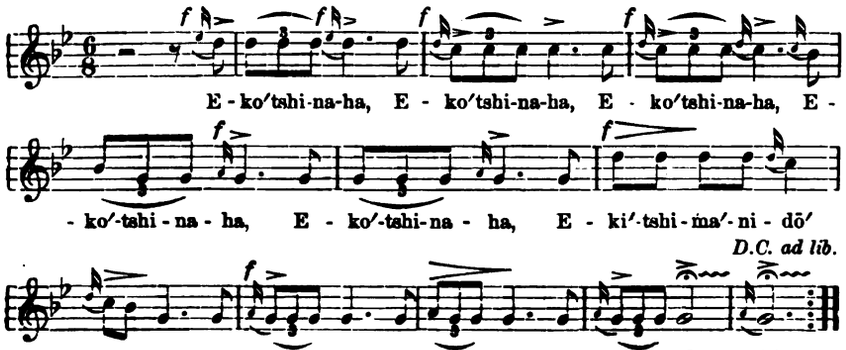




Ē-kotsh'-i-na'-ha,
Ē-kotsh'-ha man'-i-dō' hwe-do'-wī.

I hang it,
I hang up the Spirit sack.

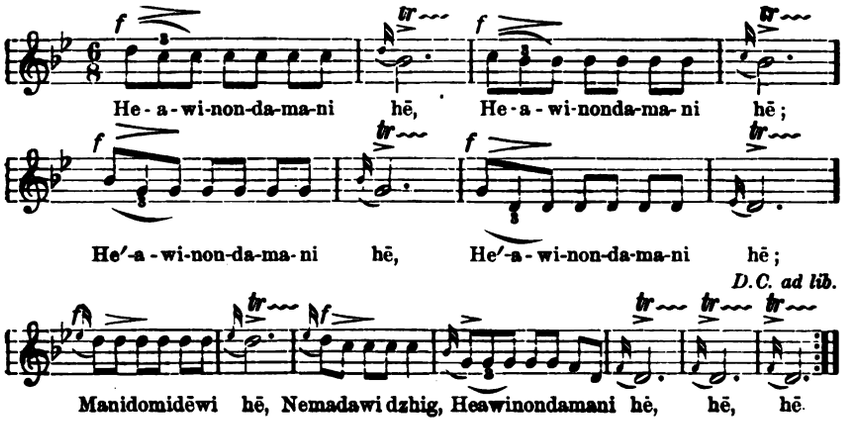
[After using his Midē' sack he hangs it against the wall of the Midē'wigan, as is usually done during the ceremonial of initiation.]



He'-a-wi-non'-dam-a'-ni,
Man'-i-dō' mi-de'-wi-he'
ne'-ma-da'-wi-dzig'.

Let them hear,
Midē' spirit, those who are sitting around.

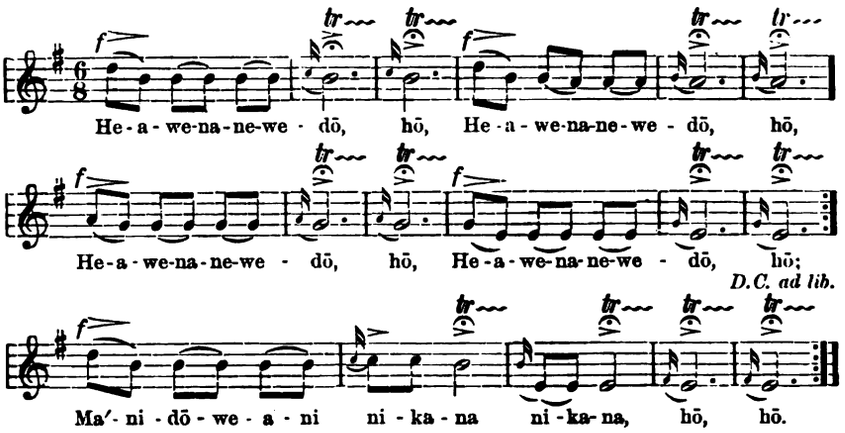
[He invokes Ki'tshi Man'idō to make his auditors understand his power.]



He'-a-we-na' ni'-we-dō',
Man'-i-dō' we-a-nī'
Ni'-ka-nā' ni'-na-nā'.

He who is sleeping,
The Spirit, I bring him, a kinsman.

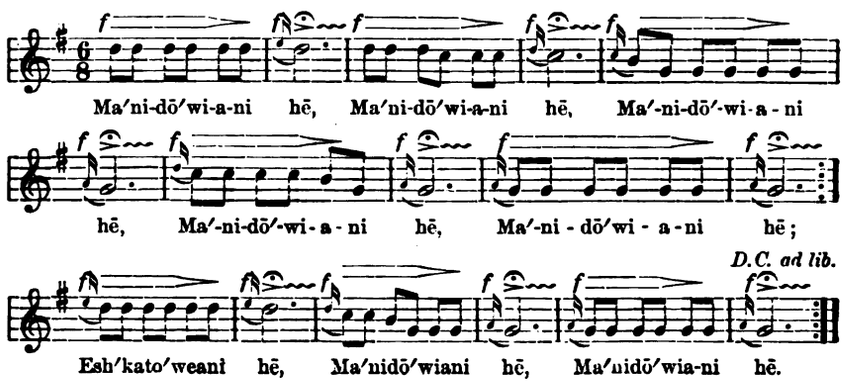
[In the employment of his powers he resorts to the help of Ki'tshi Man'idō—his kinsman or Midē' colleague.]



Man'-i-dō' we-a-nī'
Esh-ke'-ta we'-a-nī' man'-i-dō' we'-a-nī'.

I am a spirit,
Fire is my spirit body.

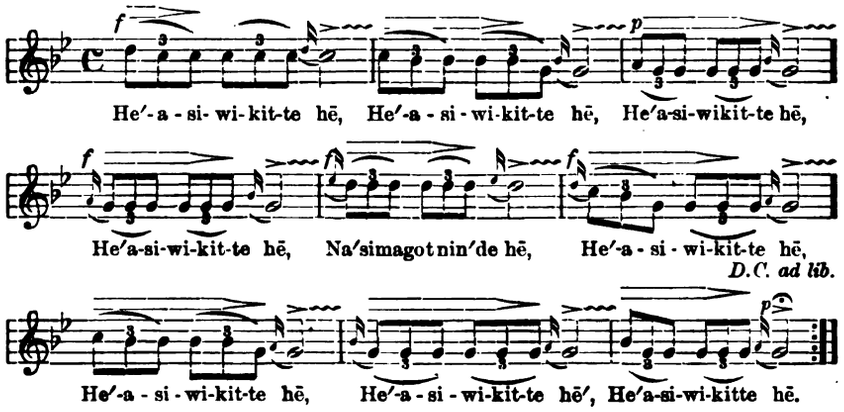
[The hand reaches to the earth to grasp fire, showing his ability to do so without injury and illustrating in this manner his supernatural power.]



Ai-ya′-swa-kĭt-te′, hē′, he′,
He′-ā′ se-wī′-kit-te′, hē′, hē′
Na-se′-ma-gŏt′ nin-dē′.

It is leaning,
My heart breathes.

[The phrase refers to the mī′gis within his heart. The short radiating lines indicate the magic power of the shell.]

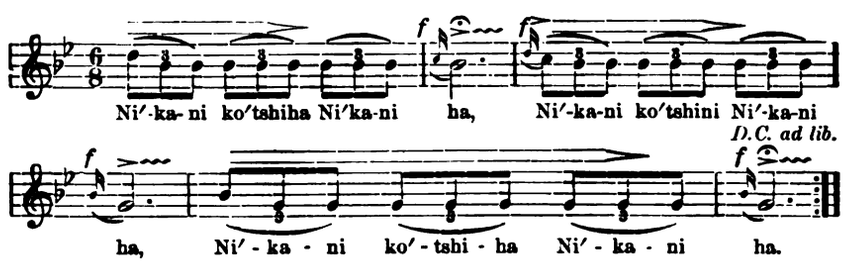


Rest, or pause, after which dancing accompanies the remainder of the song.

Ni-ka′-nin-ko′-tshi′-ha ni′-ka-na
Ni-ka′-na-nin-ko′-tshi-ha.

Midē′ friends, I am trying, Midē′ friends, Midē′ friends, I am trying.

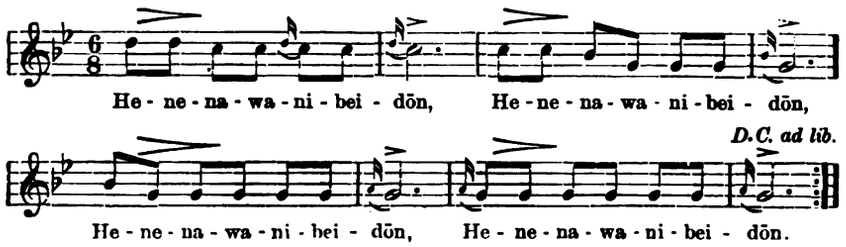
[His hand and arm crossed by lines to denote magic power, in reaching to grasp more than four degrees have given him: he has in view a fifth, or its equivalent.]

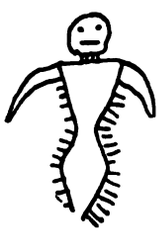


Hi'-ne-na-wa' ni-be'-i-dōn' ni-di'-na.

I hold that which I brought, and told him.

[The singer is holding the mī'gis and refers to his having its power, which he desires Ki'tshi Man'idō to augment.]

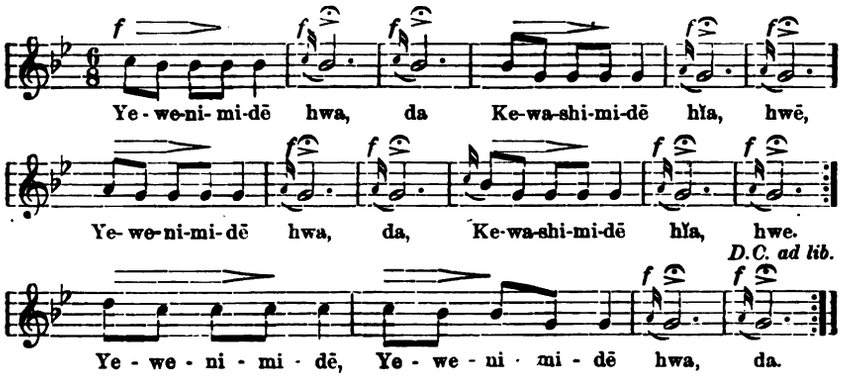


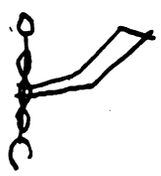


Ye'-we-ni'-mi-dē', hwa', da', Ke-wa'-shi-mi-dē', hĭ-a, hwē', Ye'-we-ni'-mi-dē?

Who is this grand Midē'? You have not much grand medicine. Who is the Midē'?

[The first line, when used with the music, is a'-we-nin-o'-au-midē'. The whole phrase refers to boasters, who have not received the proper initiations which they profess. The figure is covered with mī'gis shells, as shown by the short lines attached to the body.]

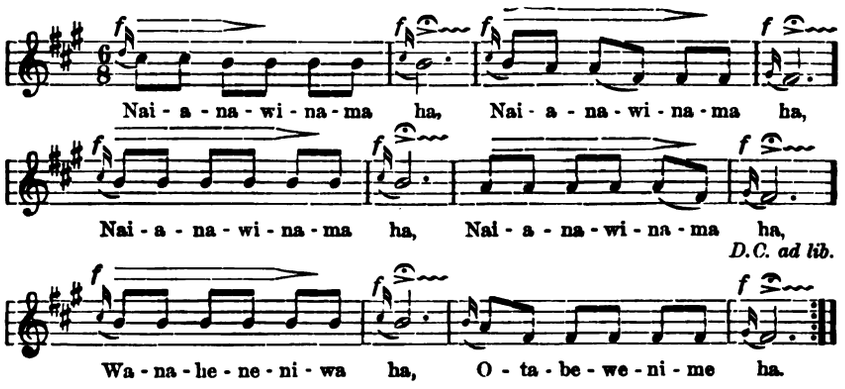




Nai'-a-na-wī' na-ma', ha', Wa-na'-he-ne-ni-wa', ha', O'-ta-be-we-ni', mē', hē'.

I can not reach it,
Only when I go round the Midē'wigân;
I can not reach it from where I sit.

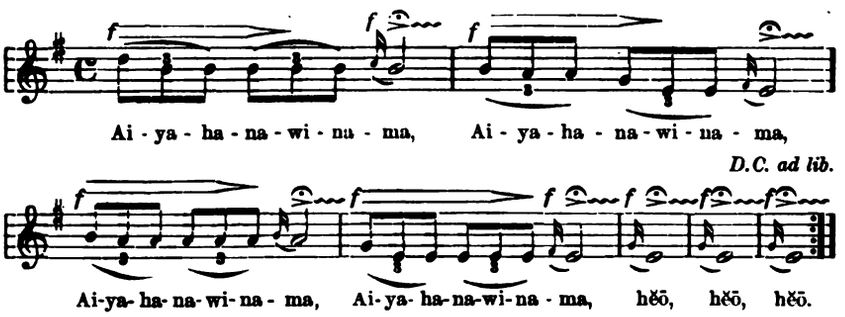
[The mī'gis attached to the arrow signifies its swift and certain power and effect. The first line of the phrase, when spoken, is nin-na'-na-wi-nan'.]



Ai-yā' ha'-na-wi'-na-ma'.

I can not strike him.

[The speaker is weeping because he can not see immediate prospects for further advancement in the acquisition of power. The broken ring upon his breast is the place upon which he was shot with the mī'gis.]



The following musical notation presents accurately the range of notes employed by the preceptor. The peculiarity of Midē' songs lies in the fact that each person has his own individual series of notes which correspond to the number of syllables in the phrase and add thereto meaningless words to prolong the effect. When a song is taught, the words are the chief and most important part, the musical rendering of a second person may be so different from that of the person from whom he learns it as to be unrecognizable without

the words. Another fact which often presents itself is the absence of time and measure, which prevents any reduction to notation by full bars; e. g., one or two bars may appear to consist of four quarter notes or a sufficient number of quarters and eighths to complete such bars, but the succeeding one may consist of an additional quarter, or perhaps two, thus destroying all semblance of rythmic continuity. This peculiarity is not so common in dancing music, in which the instruments of percussion are employed to assist regularity and to accord with the steps made by the dancers, or vice versa.

In some of the songs presented in this paper the bars have been omitted for the reasons presented above. The peculiarity of the songs as rendered by the preceptor is thus more plainly indicated.

When the chant is ended the ushers, who are appointed by the chief Midē', leave the inclosure to bring in the vessels of food. This is furnished by the newly elected member and is prepared by his female relatives and friends. The kettles and dishes of food are borne around four times, so that each one present may have the opportunity of eating sufficiently. Smoking and conversation relating to the Midē'wiwin may then be continued until toward sunset, when, upon an intimation from the chief Midē', the members quietly retire, leaving the structure by the western door. All personal property is removed, and upon the following day everybody departs.

DESCRIPTIVE NOTES.

The amount of influence wielded by Midē' generally, and particularly such as have received four degrees, is beyond belief. The rite of the Midē'wiwin is deemed equivalent to a religion—as that term is commonly understood by intelligent people—and is believed to elevate such a Midē' to the nearest possible approach to the reputed character of Mi'nabō'zho, and to place within his reach the supernatural power of invoking and communing with Ki'tshi Man'idō himself.

By reference to Pl. III, A, No. 98, it will be observed that the human figure is specially marked with very pronounced indications of mī'gis spots upon the head, the extremities, and more particularly the breast. These are placed where the mīgis was "shot" into the Midē', and the functions of the several parts are therefore believed to be greatly augmented. All the spots are united by a line to denote unity and harmony of action in the exercise of power.

The mī'gis, typical of the fourth degree, consists of small pieces of deer horn, covered with red paint on one end and green upon the other. Sometimes but one color is employed for the entire object. The form is shown on Pl. XI, No. 6. No. 2, upon the same plate, represents a shell, used as a mī'gis, observed at White Earth.

Figs. 5–11, on Pl. XV, present several forms of painting midē'

posts, as practiced by the several societies in Minnesota. Each society claims to preserve the ancient method. The cross, shown in No. 7, bears the typical colors—red and green—upon the upper half, while the lower post is square and colored white on the east, green on the south, red on the west, and black on the north. The Midē' explain the signification of the colors as follows: White represents the east, the source of light and the direction from which the sacred mī'gis came; green, sha'manō the southern one, refers to the source of the rains, the direction from which the Thunderers come in the spring, they who revivify the earth; red refers to the land of the setting sun, the abode of the shadows or the dead; and north being black, because that is the direction from which come cold, hunger, and disease.

The words of the Midē' priest alluding to "the path that has no end" refer to the future course and conduct of the candidate for the last degree, as well as to the possibility of attaining unlimited powers in magic, and is pictorially designated upon the chart on Pl. III, A, at No. 99. The path is devious and beset with temptations, but by strict adherence to the principles of the Midē'wiwin the Midē' may reach the goal and become the superior of his confrères. designated Mi-ni'-si-nō'-shkwe, "he who lives on the island."

A Midē'-Wâbĕnō' of this degree is dreaded on account of his extraordinary power of inflicting injury, causing misfortune, etc., and most remarkable tales are extant concerning his astounding performances with fire.

The following performance is said to have occurred at White Earth, Minnesota, in the presence of a large gathering of Indians and mixed bloods. Two small wig'iwams were erected, about 50 paces from each other, and after the Wâbĕnō' had crawled into one of them his disparagers built around each of them a continuous heap of brush and firewood, which were then kindled. When the blaze was at its height all became hushed for a moment, and presently the Wâbĕnō' called to the crowd that he had transferred himself to the other wig'iwam and immediately, to their profound astonishment, crawled forth unharmed.

This is but an example of the numerous and marvelous abilities with which the Wâbĕnō' of the higher grade is accredited.

The special pretensions claimed by the Midē-Wâbĕnō' have already been mentioned, but an account of the properties and manner of using the "love powder" may here be appropriate. This powder—the composition of which has been given—is generally used by the owner to accomplish results desired by the applicant. It is carried in a small bag made of buckskin or cloth, which the Wâbĕnō' carefully deposits within his Midē' sack, but which is transferred to another sack of like size and loaned to the applicant, for a valuable consideration.

During a recent visit to one of the reservations in Minnesota, I had occasion to confer with a Catholic missionary regarding some of the peculiar medical practices of the Indians, and the implements and other accessories employed in connection with their profession. He related the following incident as having but a short time previously come under his own personal observation:

One of the members of his church, a Norwegian, sixty-two years of age, and a widower, had for the last preceding year been considered by most of the residents as demented. The missionary himself had observed his erratic and frequently irrational conduct, and was impressed with the probable truth of the prevailing rumor. One morning, however, as the missionary was seated in his study, he was surprised to receive a very early call, and upon invitation his visitor took a seat and explained the object of his visit. He said that for the last year he had been so disturbed in his peace of mind that he now came to seek advice. He was fully aware of the common report respecting his conduct, but was utterly unable to control himself, and attributed the cause of his unfortunate condition to an occurrence of the year before. Upon waking one morning his thoughts were unwillingly concentrated upon an Indian woman with whom he had no personal acquaintance whatever, and, notwithstanding the absurdity of the impression, he was unable to cast it aside. After breakfast he was, by some inexplicable influence, compelled to call upon her, and to introduce himself, and although he expected to be able to avoid repeating the visit, he never had sufficient control over himself to resist lurking in the vicinity of her habitation.

Upon his return home after the first visit he discovered lying upon the floor under his bed, a Midē' sack which contained some small parcels with which he was unfamiliar, but was afterward told that one of them consisted of "love powder." He stated that he had grown children, and the idea of marrying again was out of the question, not only on their account but because he was now too old. The missionary reasoned with him and suggested a course of procedure, the result of which had not been learned when the incident was related.

Jugglery of another kind, to which allusion has before been made, is also attributed to the highest class of Jĕs'sakkīd'. Several years ago the following account was related to Col. Garrick Mallery, U. S. Army, and myself, and as Col. Mallery subsequently read a paper before the Anthropological Society of Washington, District of Columbia, in which the account was mentioned, I quote his words:

Paul Beaulieu, an Ojibwa of mixed blood, present interpreter at White Earth Agency, Minnesota, gave me his experience with a Jĕs'sakkīd', at Leech Lake, Minnesota, about the year 1858. The reports of his wonderful performances had reached the agency, and as Beaulieu had no faith in jugglers, he offered to wager

$100, a large sum, then and there, against goods of equal value, that the juggler could not perform satisfactorily one of the tricks of his repertoire to be selected by him (Beaulieu) in the presence of himself and a committee of his friends. The Jĕs'sakkân'—or Jĕs'sakkīd' lodge—was then erected. The framework of vertical poles, inclined to the center, was filled in with interlaced twigs covered with blankets and birch-bark from the ground to the top, leaving an upper orifice of about a foot in diameter for the ingress and egress of spirits and the objects to be mentioned, but not large enough for the passage of a man's body. At one side of the lower wrapping a flap was left for the entrance of the Jĕs'sakkīd'.

A committee of twelve was selected to see that no communication was possible between the Jĕs'sakkīd' and confederates. These were reliable people, one of them the Episcopal clergyman of the reservation. The spectators were several hundred in number, but they stood off, not being allowed to approach.

The Jĕs'sakkīd' then removed his clothing, until nothing remained but the breech-cloth. Beaulieu took a rope (selected by himself for the purpose) and first tied and knotted one end about the juggler's ankles; his knees were then securely tied together, next the wrists, after which the arms were passed over the knees and a billet of wood passed through under the knees, thus securing and keeping the arms down motionless. The rope was then passed around the neck, again and again, each time tied and knotted, so as to bring the face down upon the knees. A flat river-stone, of black color—which was the Jĕs'sakkīd''s ma'nidō or amulet—was left lying upon his thighs.

The Jĕs'sakkīd' was then carried to the lodge and placed inside upon a mat on the ground, and the flap covering was restored so as to completely hide him from view.

Immediately loud, thumping noises were heard, and the framework began to sway from side to side with great violence; whereupon the clergyman remarked that this was the work of the Evil One and 'it was no place for him,' so he left and did not see the end. After a few minutes of violent movements and swayings of the lodge accompanied by loud inarticulate noises, the motions gradually ceased when the voice of the juggler was heard, telling Beaulieu to go to the house of a friend, near by, and get the rope. Now, Beaulieu, suspecting some joke was to be played upon him, directed the committee to be very careful not to permit any one to approach while he went for the rope, which he found at the place indicated, still tied exactly as he had placed it about the neck and extremities of the Jĕs'sakkīd'. He immediatedly returned, laid it down before the spectators, and requested of the Jĕss'akkīd' to be allowed to look at him, which was granted, but with the understanding that Beaulieu was not to touch him.

When the covering was pulled aside, the Jĕs'sakkīd' sat within the lodge, contentedly smoking his pipe, with no other object in sight than the black stone mánidō. Beaulieu paid his wager of $100.

An exhibition of similar pretended powers, also for a wager, was announced a short time after, at Yellow Medicine, Minnesota, to be given in the presence of a number of Army people, but at the threat of the Grand Medicine Man of the Leech Lake bands, who probably objected to interference with his lucrative monopoly, the event did not take place and bets were declared off.

Col. Mallery obtained further information of a similar kind from various persons on the Bad River Reservation, and at Bayfield, Wisconsin. All of these he considered to be mere variants of a class of performances which were reported by the colonists of New England and the first French missionaries in Canada as early as 1613, where the general designation of "The Sorcerers" was applied to the whole body of Indians on the Ottawa River. These reports, it must be

remembered, however, applied only to the numerous tribes of the Algonkian linguistic family among which the alleged practices existed; though neighboring tribes of other linguistic groups were no doubt familiar with them, just as the Winnebago, Omaha, and other allied tribes, profess to have "Medicine Societies," the secrets of which they claim to have obtained from tribes located east of their own habitat, that practiced the peculiar ceremony of "shooting small shells" (i. e., the mīgis of the Ojibwa) into the candidate.

In Pl. XVIII is shown a Jĕs'sakkīd' extracting sickness by sucking through bone tubes.

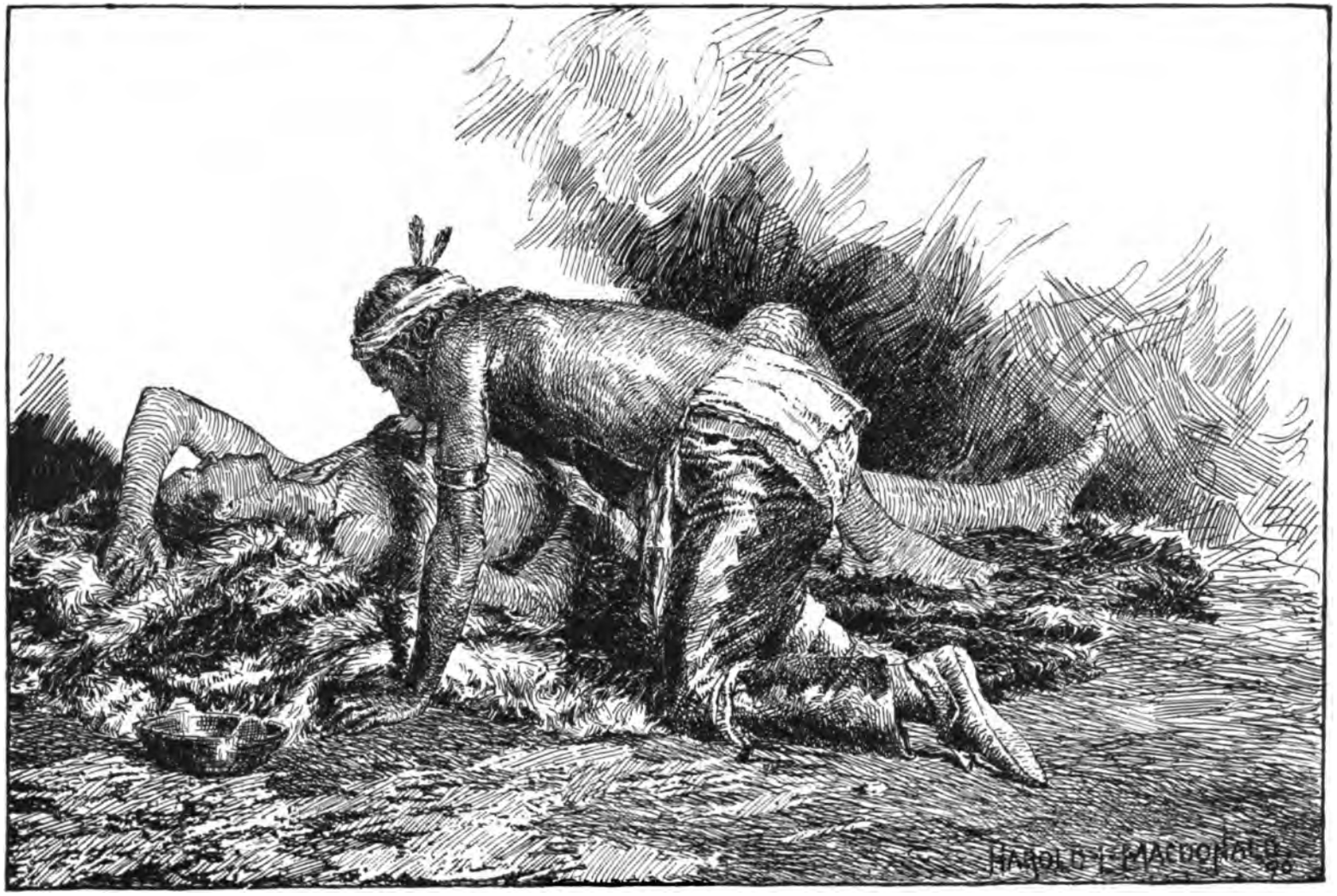
DZHIBAI' MIDĒ'WIGÂN, OR "GHOST LODGE."

A structure erected by Indians for any purpose whatever, is now generally designated a lodge, in which sense the term is applied in connection with the word dzhibai'—ghost, or more appropriately shadow—in the above caption. This lodge is constructed in a form similar to that of the Midē'wigân, but its greatest diameter extends north and south instead of east and west. Further reference will be made to this in describing another method of conferring the initiation of the first degree of the Midē'wiwin. This distinction is attained by first becoming a member of the so-called "Ghost Society," in the manner and for the reason following:

After the birth of a male child it is customary to invite the friends of the family to a feast, designating at the same time a Midē' to serve as godfather and to dedicate the child to some special pursuit in life. The Midē' is governed in his decision by visions, and it thus sometimes happens that the child is dedicated to the "Grand Medicine," i. e., he is to be prepared to enter the society of the Midē'. In such a case the parents prepare him by procuring a good preceptor, and gather together robes, blankets, and other gifts to be presented at initiation.

Should this son die before the age of puberty, before which period it is not customary to admit any one into the society, the father paints his own face as before described, viz, red, with a green stripe diagonally across the face from left to right, as in Pl. VI, No. 4, or red with two short horizontal parallel bars in green upon the forehead as in Pl. VI, No. 5, and announces to the chief Midē' priest his intention of becoming himself a member of the "Ghost Society" and his readiness to receive the first degree of the Midē'wiwin, as a substitute for his deceased son. Other members of the mourner's family blacken the face, as shown on Pl. VII, No. 5.

In due time a council of Midē' priests is called, who visit the wig'iwam of the mourner, where they partake of a feast, and the subject of initiation is discussed. This wig'iwam is situated south and east



JĔS'AKKĬD' REMOVING DISEASE.

of the Midē'wigân, as shown in Fig. 30, which illustration is a reproduction of a drawing made by Sikas'sigĕ.

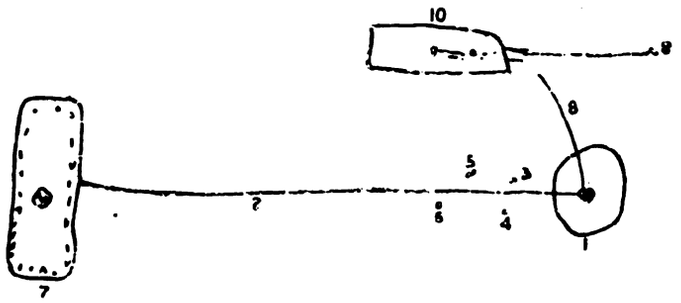


FIG. 35. Indian diagram of ghost lodge.

The following is an explanation of the several characters:

No. 1 represents the wig'iwam of the mourner, which has been erected in the vicinity of the Midē'wigân, until after the ceremony of initiation.

No. 2 is the path supposed to be taken by the shadow (spirit) of the deceased; it leads westward to the Dzhibai' Midē'wigân; literally, shadow-spirit wig'iwam.

No. 3, 4, 5, and 6, designate the places where the spirit plucks the fruits referred to—respectively the strawberry, the blueberry, the June cherries, and the plum.

No. 7 designates the form and location of the Dzhihai' Midē'wigân. The central spot is the place of the dish of food for Dzhibai' Man'idō—the good spirit—and the smaller spots around the interior of the inclosure are places for the deposit of dishes for the other Midē' spirits who have left this earth.

No. 8 is the path which is taken by the candidate when going from his wig'iwam to the Midē'wigân.

No. 9 indicates the place of the sweat-lodge, resorted to at other periods of initiation.

No. 10 is the Midē'wigân in which the ceremony is conducted at the proper time.

It is stated that in former times the Ghost Lodge was erected west of the location of the mourner's wig'iwam, but for a long time this practice has been discontinued. The tradition relating to the Spirit's progress is communicated orally, while the dramatic representation is confined to placing the dishes of food in the Midē'wigân, which is selected as a fitting and appropriate substitute during the night preceding the initiation.

This custom, as it was practiced, consisted of carrying from the mourner's wig'iwam to the Ghost Lodge the dishes of food for the spirits of departed Midē' to enjoy a feast, during the time that the Midē' priests were partaking of one. A large dish was placed in the center of the structure by the mourner, from which the supreme Midē' spirit was to eat. Dishes are now carried to the Midē'wigân, as stated above.

The chief officiating Midē' then instructs the father of the deceased boy the manner in which he is to dress and proceed, as symbolizing the course pursued by the spirit of the son on the way to the spirit

world. The instructions are carried out, as far as possible, with the exception of going to an imaginary Ghost Lodge, as he proceeds only to the Midē'wigân and deposits the articles enumerated below. He is told to take one pair of bear-skin moccasins, one pair of wolf-skin, and one pair of birds' skins, in addition to those which he wears upon his feet; these are to be carried to the structure in which the Midē' spirits are feasting, walking barefooted, picking a strawberry from a plant on the right of the path and a blueberry from a bush on the left, plucking June cherries from a tree on the right and plums on the left. He is then to hasten toward the Ghost Lodge, which is covered with mī'gis, and to deposit the fruit and the moccasins; these will be used by his son's spirit in traveling the road of the dead after the spirits have completed their feast and reception of him. While the candidate is on his mission to the Ghost Lodge (for the time being represented by the Midē'wigân) the assemblage in the wig'iwam chant the following for the mourner: Yan'-i-ma-tsha', yan'-i-ma-tsha', ha', yan'-i-ma-tsha' yan'-i-ma-tsha' ha', yu'-te-no-win' gē,' hē' nin-de'-so-ne'—"I am going away, I am going away, I am going away, to the village I walk"—i. e., the village of the dead.

The person who desires to receive initiation into the Midē'wigân, under such circumstances, impersonates Minabō'zho, as he is believed to have penetrated the country of the abode of shadows, or ne'-ba-gī'-zis—"land of the sleeping sun." He, it is said, did this to destroy the "Ghost Gambler" and to liberate the many victims who had fallen into his power. To be enabled to traverse this dark and dismal path, he borrowed of Kŏ-ko'-kŏ-ō'—the owl—his eyes, and received also the services of wē'-we-tē'-si-wŭg—the firefly, both of which were sent back to the earth upon the completion of his journey. By referring to Pl. III, A, the reference to this myth will be observed as pictorially represented in Nos. 110 to 114. No. 110 is the Midē'wigân from which the traveler has to visit the Dzhibai' Midē'-wigân (No. 112) in the west. No. 113, represented as Kŏ-ko'-kŏ-ō'—the owl—whose eyes enabled Mī'nabō'zho to follow the path of the dead (No. 114); the owl skin Midē' sack is also sometimes used by Midē' priests who have received their first degree in this wise. The V-shaped characters within the circle at No. 111 denote the presence of spirits at the Ghost Lodge, to which reference has been made.

The presents which had been gathered as a gift or fee for the deceased are now produced and placed in order for transportation to the Midē'wigân, early on the following morning.

The Midē' priests then depart, but on the next morning several of them make their appearance to assist in clearing the Midē'wigân of the dishes which had been left there over night, and to carry thither the robes, blankets, and other presents, and suspend them from the rafters. Upon their return to the candidate's wig'iwam, the Midē' priests gather, and after the candidate starts to lead the procession

toward the Midē'wigân, the priests fall in in single file, and all move forward, the Midē' priests chanting the following words repeatedly, viz: Ki-e'-ne-kwo-tâ' ki-e'-ne-kwo-tâ', ha', ha', ha', nōs e'wi-e', hē', ki'-na-ka'-ta-mŭn' do-nâ'-gan—"I also, I also, my father, leave you my dish."

This is sung for the deceased, who is supposed to bequeath to his father his dish, or other articles the names of which are sometimes added.

The procession continues toward and into the Midē'wigân, passing around the interior by the left side toward the west, north, and east to a point opposite the space usually reserved for the deposit of goods, where the candidate turns to the right and stands in the middle of the inclosure, where he now faces the Midē' post in the west. The members who had not joined the procession, but who had been awaiting its arrival, now resume their seats, and those who accompanied the candidate also locate themselves as they desire, when the officiating priests begin the ceremony as described in connection with the initiation for the first degree after the candidate has been turned over to the chief by the preceptor.

Sometimes the mother of one who had been so dedicated to the Midē'wiwin is taken into that society, particularly when the father is absent or dead.

INITIATION BY SUBSTITUTION.

It sometimes happens that a sick person can not be successfully treated by the Midē', especially in the wig'iwam of the patient, when it becomes necessary for the latter to be carried to the Midē'wigân and the services of the society to be held. This course is particularly followed when the sick person or the family can furnish a fee equivalent to the gift required for initiation under ordinary circumstances.

It is believed, under such conditions, that the evil man'idōs can be expelled from the body only in the sacred structure, at which place alone the presence of Ki'tshi Man'idō may be felt, after invocation, and in return for his aid in prolonging the life of the patient the latter promises his future existence to be devoted to the practice and teachings of the Midē'wiwin. Before proceeding further, however, it is necessary to describe the method pursued by the Midē' priest.

The first administrations may consist of mashki'kiwabū", or medicine broth, this being the prescription of the Midē' in the capacity of mashki'kike'winĭ'nĭ, or herbalist, during which medication he resorts to incantation and exorcism, accompanying his song by liberal use of the rattle. As an illustration of the songs used at this period of the illness, the following is presented, the mnemonic characters being reproduced on Pl. XVI, C. The singing is monotonous and doleful, though at times it becomes animated and discordant.

In'-do-nâ-gât in-da'-kwo-nan

That which I live upon has been put on this dish by the spirit.

[Ki'tshi Man'idō provides the speaker with the necessary food for the maintenance of life. The dish, or feast, is shown by the concentric rings, the spirit's arm is just below it.]

Mo'-ki-yan tshik'-ko-min'.

I bring life to the people.

[The speaker, as the impersonator of the sacred Otter, brings life. The Otter is just emerging from the surface of the water, as he emerged from the great salt sea before the Âni'shi-nâ'beg, after having been instructed by Mi'nabō'zho to carry life to them.]

Ni'-no-mūn' mash-ki'-ki

I can also take medicine from the lodge, or the earth

[The Midē''s arm is reaching down to extract magic remedies from the earth. The four spots indicate the remedies, while the square figure denotes a hole in the ground.]

Rest. During this interval the Midē''s thoughts dwell upon the sacred character of the work in which he is engaged.

Ni'-nin-dē' in'-dai-yo'.

It is all in my heart, the life.

[The concentric circles indicates the mī'gis, life, within the heart, the former showing radiating lines to denote its magic power.]

M'bi-mo'-se-an-kĭnk'.

The spirit saw me and sent me medicine from above.

[The figure is that of Ki'tshi Man'idō, who granted power to the speaker.]

Dōn'-de-na mi-tĭz'-kŭnk.

It is also on the trees, that from which I take life.

[The tree bears "medicine" which the speaker has at his command, and is enabled to use.]

When the ordinary course of treatment fails to relieve the patient the fact is made known to the Midē′ priests and he is consequently taken to the Midē′wigân and laid upon blankets so that part of his body may rest against the sacred midē stone. Associate Midē then attend, in consultation, with the Midē-in-chief, the other members present occupying seats around the walls of the structure.

The accompanying lecture is then addressed to the sick person, viz:

Mi-shosh′-yâ-gwa′ ga′-a-nin-nan′ gi′-de-wēn′-du-nŭn ne′-tun-ga′-da-da-we′-in man′-i-dōmĭ′-gis. Kit′-ti-mâ′-gĭ-si ē′-ni-dau′-â-ya-we′-yĭn o-ma′-e-nâ′-sa-ba-bĭt bĭ-I-sha′-gaban′-dĕ-a gi-bĭ′-sha-ban-da′-ĕt na-pĭsh-kâ-tshi-dŏsh ke′-a-yŭ′-ĭn-ki-go gŏt-tâ-sō-nĕn′, mĭ′-a-shĭ′-gwa-gō-dĭn′-na-wât dzhi-ma′-di-a-kad′-dŏ-yŏn bi-mâ-di-si-wĭn′.

The following is a free translation of the above:

The time of which I spoke to you has now arrived, and you may deem it necessary to first borrow the sacred mĭ′gis. Who are you that comes here as a supplicant? Sit down opposite to me, where I can see you and speak to you, and fix your attention upon me, while you receive life you must not permit your thoughts to dwell upon your present condition, but to support yourself against falling into despondency.

Now we are ready to try him; now we are ready to initiate him.

The reference to borrowing a mĭ′gis signifies that the patient may have this mysterious power "shot into his body" where he lies upon the ground and before he has arrived at the place where candidates are properly initiated; this, because of his inability to walk round the inclosure.

The last sentence is spoken to the assisting Midē′. The following song is sung, the mnemonic characters pertaining thereto being reproduced on Pl. XVI, D.

O-da′-pi-nŭng′-mung oâ′-ki-wen′-dzhi man′-i-dō we′-an-ĭ-win′-zhi-gu-sân′.

We are going to take the sacred medicine out of the ground.

[The speaker refers to himself and the assistants as resorting to remedies adopted after consultation, the efficiency thereof depending upon their combined prayers. The arm is represented as reaching for a remedy which is surrounded by lines denoting soil.]

We-a′-ki man′-i-dō we-an-gwĭs′.

The ground is why I am a spirit, my son.

[The lower horizontal line is the earth, while the magic power which he possesses is designated by short vertical wavy lines which reach his body.]

Rest.

Nish′-u-we-ni-mi′-qu nish′-u-we-ni-mi′-qu we′-gi ma′-ŏ-dzhig′.

The spirits have pity; the spirits have pity on me.

[The Midē′ is supplicating the Midē′ spirits for aid in his wishes to cure the sick.]

Kish'-u-we-ni-mi'-qu ki'-shi'-gŭng don'-dzhi-wa'-wa-mĭk.
The spirits have pity on me; from on high I see you.
[The sky is shown by the upper curved lines, beneath which the Midē' is raising his arm in supplication.]

Man'-i-dō'-â ni'-o.
My body is a spirit.
[The Midē' likens himself to the Bear Man'idō, the magic powers of which are shown by the lines across the body and short strokes upon the back.]

Pi-ne'-si-wi-ân' ke-ke'-u-wi-an'.
A little bird I am; I am the hawk.
[Like the thunderer, he penetrates the sky in search of power and influence.]

Man'-i-dō' nu'-tu wa'-kan.
Let us hear the spirit.
[The Ki'tshi Man'idō is believed to make known his presence, and all are enjoined to listen for such intimation.]

Ka'-nun-ta'-wa man'-i-dō' wi'-da-ku-ē', hē', ki'-a-ha-mī'.
You might hear that he is a spirit.
[The line on the top of the head signifies the person to be a superior being.]

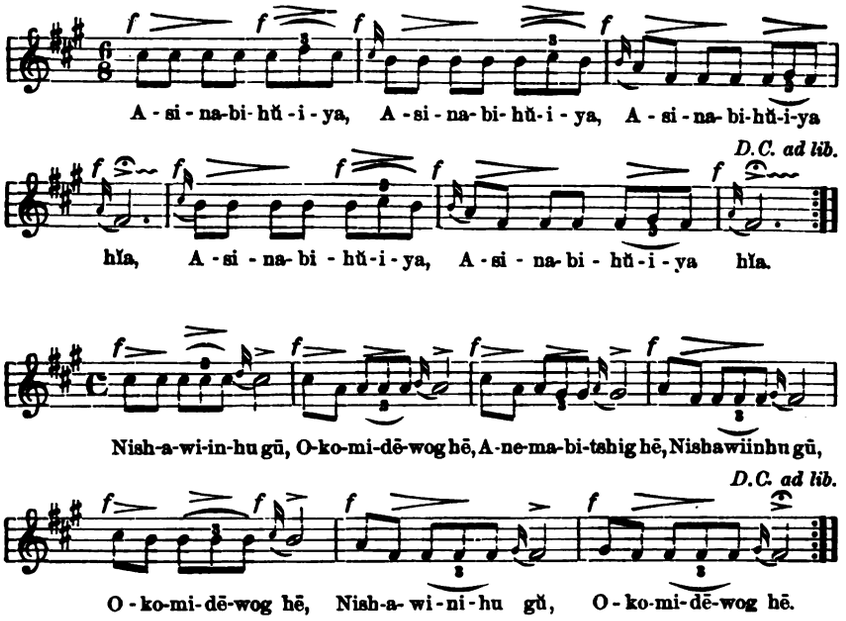
Ka'-ke-na gus-sâ' o'-mi-si'-nĭ' na'-ēn.
I am afraid of all, that is why I am in trouble.
[The Midē' fears that life can not be prolonged because the evil man'-idōs do not appear to leave the body of the sick person. The arm is shown reaching for mĭ'gis, or life, the strength of the speaker's, having himself received it four times, does not appear to be of any avail.]

Should the patient continue to show decided symptoms of increased illness, the singing or the use of the rattle is continued until life is extinct, and no other ceremony is attempted; but if he is no worse after the preliminary course of treatment, or shows any improvement, the first attendant Midē' changes his songs to those of a more boastful character. The first of these is as follows, chanted repeatedly and in a monotonous manner, viz:

A'-si-na'-bi-hu'-ya, a-si'-na'-b-hu'-ya.
I have changed my looks, I have changed my looks.
[This refers to the appearance of the Midē' stone which it is believed absorbs some of the disease and assumes a change of color.]

Nish'-a-we'nĭ', hŭ', gŭ', mi-dē', wug, a-ne'-ma-bĭ'-tshig.
The Midē' have pity on me, those who are sitting around, and those who are sitting from us.
[The last line refers to those Midē' who are sitting, though absent from the Midē'wigân.]

The following illustrates the musical rendering:



As the patient continues to improve the song of the Midē′ becomes more expressive of his confidence in his own abilities and importance.

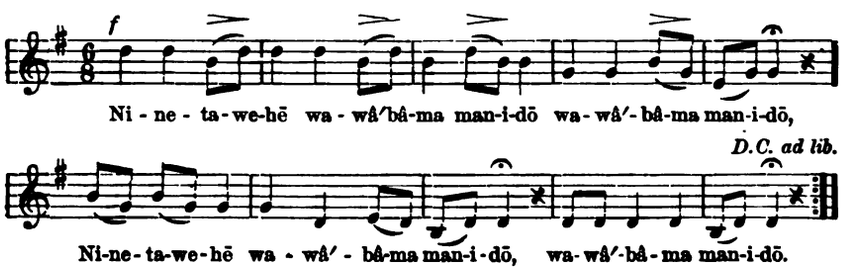
The following is an example in illustration, viz:

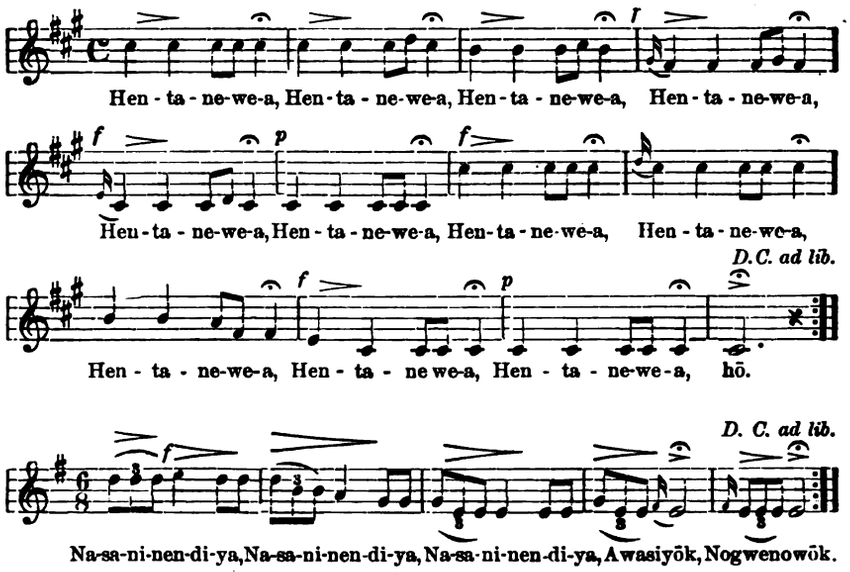
Ni-ne′-ta-we-hē′ wa-wâ′-bâ-ma′ man′-i-dō, wa-wâ′-bâ-ma′.
[I am the only one who sees the spirit, who sees the spirit.]
Nin′-da-nĭ′-wĭ-a, nin′-da-nĭ′-wĭ-a.
I surpass him, I surpass him.

[The speaker overcomes the malevolent man′idō and causes him to take flight.]
Na′-sa-ni-nēn′-di-yaⁿ a-we′-si-yŏk′ no-gwe′-no′-wŏk.
See how I act, beasts I shoot on the wing.

[The signification of this is, that he "shoots at them as they fly," referring to the man′idōs as they escape from the body.]

The following is the musical notation of the above, viz:





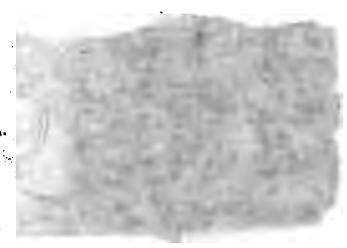
If the patient becomes strong enough to walk round the inclosure he is led to the western end and seated upon a blanket, where he is initiated. If not, the mī'gis is "shot into his body" as he reclines against the sacred stone, after which a substitute is selected from among the Midē' present, who takes his place and goes through the remainder of the initiation for him. Before proceeding upon either course, however, the chief attendant Midē' announces his readiness in the following manner: Mi'-o-shi'-gwa, wi-kwod'-gi-o-wŏg' ga-mâ'-dzhi-a-ka'-dŭng bi-mâ-di-si-wĭn'—"Now we are ready to escape from this and to begin to watch life." This signifies his desire to escape from his present procedure and to advance to another course of action, to the exercise of the power of giving life by transferring the sacred mī'gis.

The remainder of the ceremony is then conducted as in the manner described as pertains to the first degree of the Midē'wiwin.

SUPPLEMENTARY NOTES.

PICTOGRAPHY.

Before concluding, it may be of interest to refer in some detail to several subjects mentioned in the preceding pages. The mnemonic songs are in nearly every instance incised upon birch bark by means of a sharp-pointed piece of bone or a nail. The inner surface of the bark is generally selected because it is softer than the reverse. Bark for such purposes is peeled from the trunk during the spring months. On the right hand upper corner of Pl. XIX is reproduced a portion



of a mnemonic song showing characters as thus drawn. The specimen was obtained at White Earth, and the entire song is presented on Pl. XVI, C. A piece of bark obtained at Red Lake, and known to have been incised more than seventy years ago, is shown on the right lower corner of Pl. XIX. The drawings are upon the outer surface and are remarkably deep and distinct. The left hand specimen is from the last named locality, and of the same period, and presents pictographs drawn upon the inner surface.

In a majority of songs the characters are drawn so as to be read from left to right, in some from right to left, and occasionally one is found to combine both styles, being truly boustrophic. Specimens have been obtained upon which the characters were drawn around and near the margin of an oblong piece of bark, thus appearing in the form of an irregular circle.

The pictographic delineation of ideas is found to exist chiefly among the shamans, hunters, and travelers of the Ojibwa, and there does not appear to be a recognized system by which the work of any one person is fully intelligible to another. A record may be recognized as pertaining to the Midē' ceremonies, as a song used when hunting plants, etc.; but it would be impossible for one totally unfamiliar with the record to state positively whether the initial character was at the left or the right hand. The figures are more than simply mnemonic; they are ideographic, and frequently possess additional interest from the fact that several ideas are expressed in combination. Col. Garrick Mallery, U. S. Army, in a paper entitled "Recently Discovered Algonkian Pictographs," read before the American Association for the Advancement of Science, at Cleveland, 1888, expressed this fact in the following words:

> It is desirable to explain the mode of using the Midē' and other bark records of the Ojibwa and also those of other Algonkian tribes to be mentioned in this paper. The comparison made by Dr. E. B. Tylor of the pictorial alphabet to teach children "A was an archer," etc., is not strictly appropriate in this case. The devices are not only mnemonic, but are also ideographic and descriptive. They are not merely invented to express or memorize the subject, but are evolved therefrom. To persons acquainted with secret societies a good comparison for the charts or rolls would be what is called the tressel board of the Masonic order, which is printed and published and publicly exposed without exhibiting any of the secrets of the order, yet is not only significant, but useful to the esoteric in assistance to their memory as to degrees and details of ceremony.
>
> A more general mode of explaining the so-called symbolism is by a suggestion that the charts of the order or the song of a myth should be likened to the popular illustrated poems and songs lately published in Harper's Magazine for instance, "Sally in our Alley," where every stanza has an appropriate illustration. Now, suppose that the text was obliterated forever, indeed the art of reading lost, the illustrations remaining, as also the memory to many persons of the ballad. The illustrations kept in order would supply always the order of the stanzas and also the general subject-matter of each particular stanza and the latter would be a reminder of the words. This is what the rolls of birch bark do to the initiated Ojibwa, and what Schoolcraft pretended in some cases to show, but what for actual

SACRED BARK SCROLL AND CONTENTS.

something of European origin, as exemplified in the specimen illustrated on Pl. XXI, Nos. 1 and 2, showing both the obverse and reverse. The specimen is made of ash wood and measures about ten inches in length. On the obverse side, besides the figures of man'idōs, such as the Thunder bird, the serpent, and the tortoise, there is the outline of the sun, spots copied from playing cards, etc.; upon the reverse appear two spread hands, a bird, and a building, from the top of which floats the American flag. This specimen was found among the effects of a Midē' who died at Leech Lake, Minnesota, a few years ago, together with effigies and other relics already mentioned in another part of this paper.

MUSIC.

In addition to the examples of Indian music that have been given, especially the songs of shamans, it may be of interest to add a few remarks concerning the several varieties of songs or chants. Songs employed as an accompaniment to dances are known to almost all the members of the tribe, so that their rendition is nearly always the same. Such songs are not used in connection with mnemonic characters, as there are, in most instances, no words or phrases recited, but simply a continued repetition of meaningless words or syllables. The notes are thus rhythmically accentuated, often accompanied by beats upon the drum and the steps of the dancers.

An example of another variety of songs, or rather chants, is presented in connection with the reception of the candidate by the Midē' priest upon his entrance into the Midē'wigân of the first degree. In this instance words are chanted, but the musical rendition differs with the individual, each Midē' chanting notes of his own, according to his choice or musical ability. There is no set formula, and such songs, even if taught to others, are soon distorted by being sung according to the taste or ability of the singer. The musical rendering of the words and phrases relating to the signification of mnemonic characters depends upon the ability and inspired condition of the singer; and as each Midē' priest usually invents and prepares his own songs, whether for ceremonial purposes, medicine hunting, exorcism, or any other use, he may frequently be unable to sing them twice in exactly the same manner. Love songs and war songs, being of general use, are always sung in the same style of notation.

The emotions are fully expressed in the musical rendering of the several classes of songs, which are, with few exceptions, in a minor key. Dancing and war songs are always in quick time, the latter frequently becoming extraordinarily animated and boisterous as the participants become more and more excited.

Midē' and other like songs are always more or less monotonous, though they are sometimes rather impressive, especially if delivered

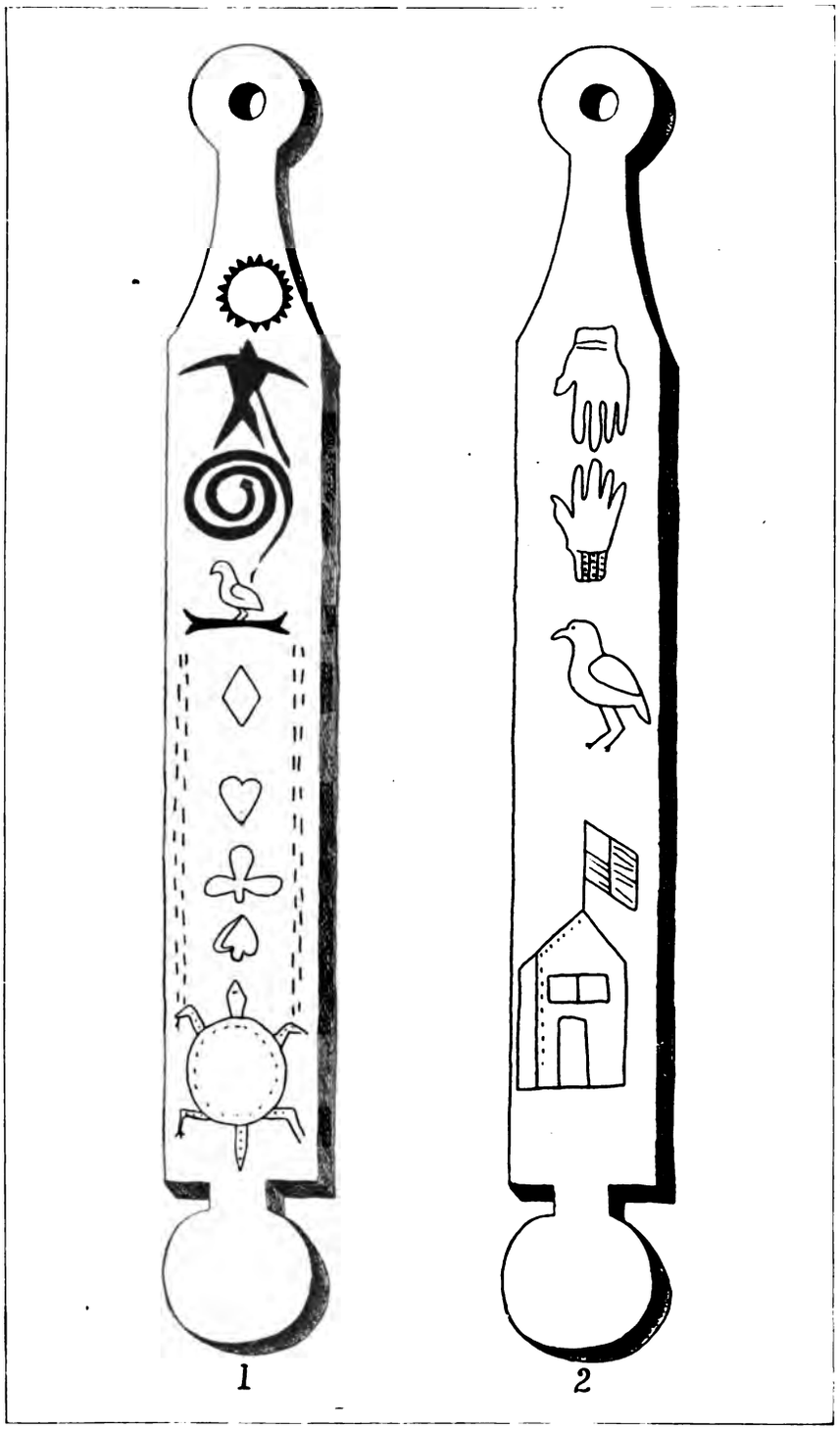
by one sufficiently emotional and possessed of a good voice. Some of the Midē' priests employ few notes, not exceeding a range of five, for all songs, while others frequently cover the octave, terminating with a final note lower still.

The statement has been made that one Midē' is unable either to recite or sing the proper phrase pertaining to the mnemonic characters of a song belonging to another Midē' unless specially instructed. The representation of an object may refer to a variety of ideas of a similar, though not identical, character. The picture of a bear may signify the Bear man'idō as one of the guardians of the society; it may pertain to the fact that the singer impersonates that man'idō; exorcism of the malevolent bear spirit may be thus claimed; or it may relate to the desired capture of the animal, as when drawn to insure success for the hunter. An Indian is slow to acquire the exact phraseology, which is always sung or chanted, of mnemonic songs recited to him by a Midē' preceptor.

An exact reproduction is implicitly believed to be necessary, as otherwise the value of the formula would be impaired, or perhaps even totally destroyed. It frequently happens, therefore, that although an Indian candidate for admission into the Midē'wiwin may already have prepared songs in imitation of those from which he was instructed, he may either as yet be unable to sing perfectly the phrases relating thereto, or decline to do so because of a want of confidence. Under such circumstances the interpretation of a record is far from satisfactory, each character being explained simply objectively, the true import being intentionally or unavoidably omitted. An Ojibwa named "Little Frenchman," living at Red Lake, had received almost continuous instruction for three or four years, and although he was a willing and valuable assistant in other matters pertaining to the subject under consideration, he was not sufficiently familiar with some of his preceptor's songs to fully explain them. A few examples of such mnemonic songs are presented in illustration, and for comparison with such as have already been recorded. In each instance the Indian's interpretation of the character is given first, the notes in brackets being supplied in further explanation. Pl. XXII, A, is reproduced from a birch-bark song; the incised lines are sharp and clear, while the drawing in general is of a superior character. The record is drawn so as to be read from right to left.

From whence I sit.

[The singer is seated, as the lines indicate contact with the surface beneath, though the latter is not shown. The short line extending from the mouth indicates voice, and probably signifies, in this instance, singing.]



MIDĒ' RELICS FROM LEECH LAKE

The big tree in the center of the earth.

[It is not known whether or not this relates to the first destruction of the earth, when Mi'nabō'zho escaped by climbing a tree which continued to grow and to protrude above the surface of the flood. One Midē' thought it related to a particular medicinal tree which was held in estimation beyond all others, and thus represented as the chief of the earth.]

I will float down the fast running stream.

[Strangely enough, progress by water is here designated by footprints instead of using the outline of a canoe. The etymology of the Ojibwa word used in this connection may suggest footprints, as in the Delaware language one word for river signifies "water road," when in accordance therewith "footprints" would be in perfect harmony with the general idea.]

The place that is feared I inhabit, the swift-running stream I inhabit.

[The circular line above the Midē' denotes obscurity, i. e., he is hidden from view and represents himself as powerful and terrible to his enemies as the water monster.]

You who speak to me.

I have long horns.

[The Midē' likens himself to the water monster, one of the malevolent serpent man'idōs who antagonize all good, as beliefs and practices of the Midē'wiwin.]

A rest or pause.

I, seeing, follow your example.

You see my body, you see my body, you see my nails are worn off in grasping the stone.

[The Bear man'idō is represented as the type now assumed by the Midē'. He has a stone within his grasp, from which magic remedies are extracted.]

You, to whom I am speaking.
[A powerful Man'idō', the panther, is in an inclosure and to him the Midē' addresses his request.]

I am swimming—floating—down smoothly.
[The two pairs of serpentine lines indicate the river banks, while the character between them is the Otter, here personated by the Midē'.]

Bars denoting a pause.

I have finished my drum.
[The Midē' is shown holding a Midē' drum which he is making for use in a ceremony.]

My body is like unto you.
[The mi'gis shell, the symbol of purity and the Midē'wiwin.]

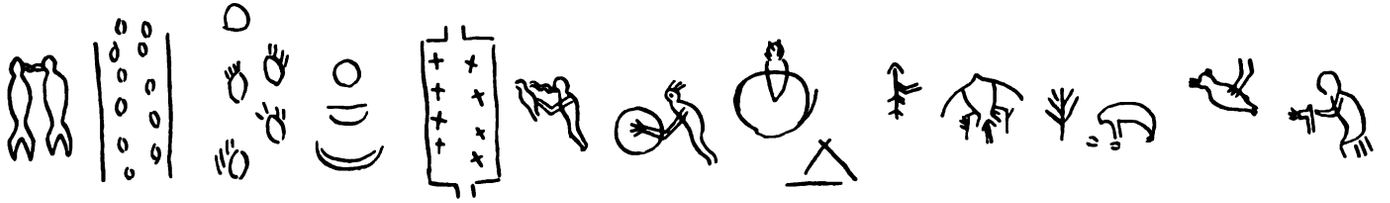
Hear me, you who are talking to me!
[The speaker extends his arms to the right and left indicating persons who are talking to him from their respective places. The lines denoting speech—or hearing—pass through the speaker's head to exclaim as above.]

See what I am taking.
[The Midē' has pulled up a medicinal root. This denotes his possessing a wonderful medicine and appears in the order of an advertise ment.]

See me, whose head is out of water.

On Pl. XXII, B, is presented an illustration reproduced from a piece of birch bark owned by the preceptor of "Little Frenchman," of the import of which the latter was ignorant. His idea of the signification of the characters is based upon general information which he has received, and not upon any pertaining directly to the record. From general appearances the song seems to be a private

A



B

MNEMONIC SONGS.

record pertaining to the Ghost Society, the means through which the recorder attained his first degree of the Midē'wiwin, as well as to his abilities, which appear to be boastfully referred to:

I am sitting with my pipe.

[Midē' sitting, holding his pipe. He has been called upon to visit a patient, and the filled pipe is handed to him to smoke preparatory to his commencing the ceremony of exorcism.]

I employ the spirit, the spirit of the owl.

[This evidently indicates the Owl Man'idō, which has been referred to in connection with the Red Lake Midē' chart, Pl. III, No. 113. The Owl man'idō is there represented as passing from the Midē'wigân to the Dzhibai' Midē'wigân, and the drawings in that record and in this are sufficiently alike to convey the idea that the maker of this song had obtained his suggestion from the old Midē' chart.]

It stands, that which I am going after.

[The Midē', impersonating the Bear Man'idō, is seeking a medicinal tree of which he has knowledge, and certain parts of which he employs in his profession. The two footprints indicate the direction the animal is taking.]

I, who fly.

[This is the outline of a Thunder bird, who appears to grasp in his talons some medical plants.]

Ki'-bi-nan' pi-zan'. Ki'binan' is what I use, it flies like an arrow.

[The Midē''s arm is seen grasping a magic arrow, to symbolize the velocity of action of the remedy.]

I am coming to the earth.

[A Man'idō is represented upon a circle, and in the act of descending toward the earth, which is indicated by the horizontal line, upon which is an Indian habitation. The character to denote the sky is usually drawn as a curved line with the convexity above, but in this instance the ends of the lines are continued below, so as to unite and to complete the ring; the intention being, as suggested by several Midē' priests, to denote great altitude above the earth, i. e., higher than the visible azure sky, which is designated by curved lines only.]

I am feeling for it.

[The Midē' is reaching into holes in the earth in search of hidden medicines.]

I am talking to it.

[The Midē' is communing with the medicine Manidō' with the Midē' sack, which he holds in his hand. The voice lines extend from his mouth to the sack, which appears to be made of the skin of an Owl, as before noted in connection with the second character in this song.]

They are sitting round the interior in a row.

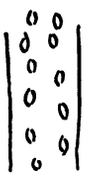
[This evidently signifies the Ghost Lodge, as the structure is drawn at right angles to that usually made to represent the Midē'wigân, and also because it seems to be reproduced from the Red Lake chart already alluded to and figured in Pl. III, No. 112. The spirits or shadows, as the dead are termed, are also indicated by crosses in like manner.]

You who are newly hung; you have reached half, and you are now full.

[The allusion is to three phases of the moon, probably having reference to certain periods at which some important ceremonies or events are to occur.]

I am going for my dish.

[The speaker intimates that he is going to make a feast, the dish being shown at the top in the form of a circle; the footprints are directed toward, it and signify, by their shape, that he likens himself to the Bear man'idō, one of the guardians of the Midēwiwin.]



I go through the medicine lodge.

[The footprints within the parallel lines denote his having passed through an unnamed number of degrees. Although the structure is indicated as being erected like the Ghost Lodge, i. e., north and south, it is stated that Midēwiwin is intended. This appears to be an instance of the non-systematic manner of objective ideagraphic delineation.]

Let us commune with one another.

[The speaker is desirous of communing with his favorite man'idōs, with whom he considers himself on an equality, as is indicated by the anthropomorphic form of one between whom and himself the voice lines extend.]

On Figs. 36–39, are reproduced several series of pictographs from birch-bark songs found among the effects of a deceased Midē' priest, at Leech Lake. Reference to other relics belonging to the same collection has been made in connection with effigies and beads employed by Midē' in the endeavor to prove the genuineness of their religion and profession. These menmonic songs were exhibited to many Midē' priests from various portions of the Ojibwa country, in the hope of obtaining some satisfactory explanation regarding the import of the several characters; but, although they were pronounced to be "Grand Medicine," no suggestions were offered beyond the merest repetition of the name of the object or what it probably was meant to represent. The direction of their order was mentioned, because in most instances the initial character furnishes the guide. Apart from this, the illustrations are of interest as exhibiting the superior character and cleverness of their execution.

The initial character on Fig. 36 appears to be at the right hand upper corner, and represents the Bear Man'idō. The third figure is

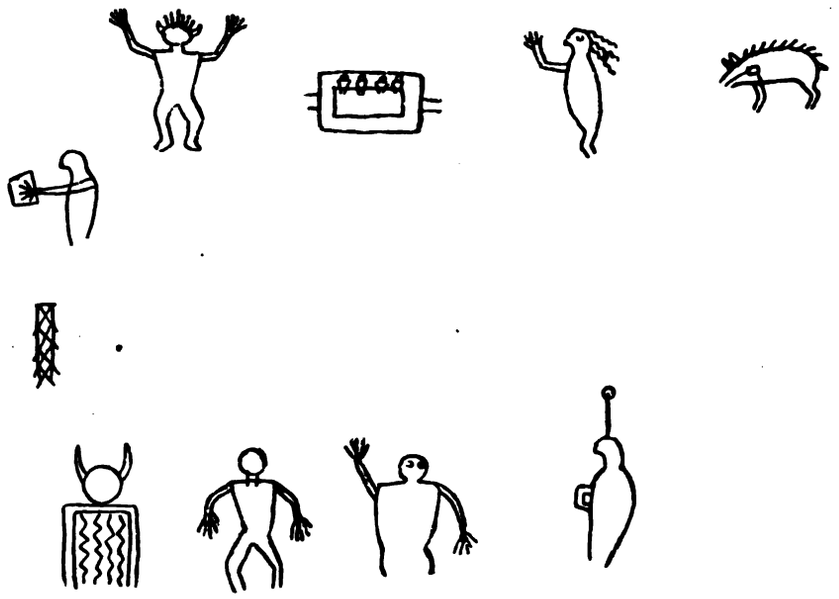


FIG. 36.—Leech Lake Midē' song.

that of the Midē'wiwin, with four man'idōs within it, probably the guardians of the four degrees. The owner of the song was a Midē' of the second degree, as was stated in connection with his Midē'wigwas or "medicine chart," illustrated on Plate III, C.

Fig. 37 represents what appears to be a mishkiki or medicine song, as is suggested by the figures of plants and roots. It is impossible to state absolutely at which side the initial character is placed, though it would appear that the human figure at the upper left hand corner would be more in accordance with the common custom.

Fig. 38 seems to pertain to hunting, and may have been recognized as a hunter's chart. According to the belief of several Midē', it is read from right to left, the human figure indicating the direction according to the way in which the heads of the crane, bear, etc., are turned. The lower left hand figure of a man has five marks upon the breast, which probably indicate mī'gis spots, to denote the power of magic influence possessed by the recorder.

The characters on Fig. 39 are found to be arranged so as to read from the right hand upper corner toward the left, the next line continuing to the right and lastly again to the left, terminating with

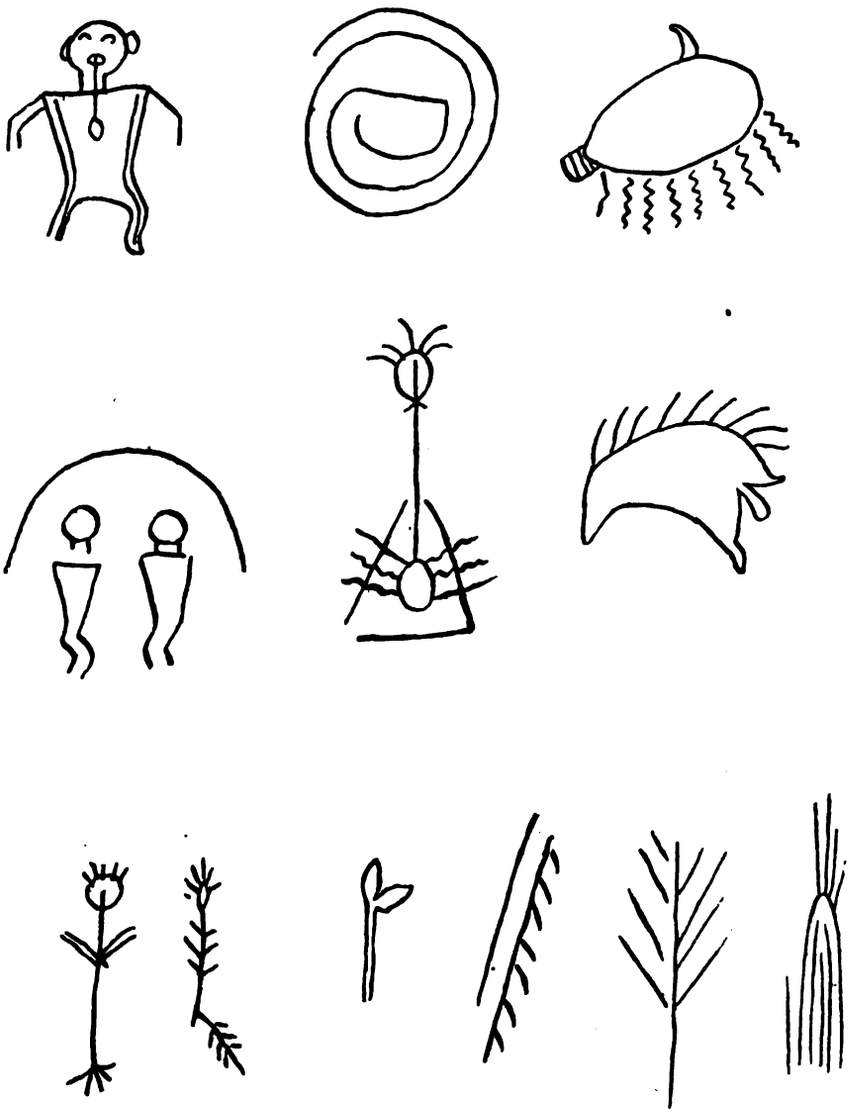


FIG. 37.—Leech Lake Midē' song.

the figure of a Midē' with the mī'gis upon his breast. This is interesting on account of the boustrophic system of delineating the figures, and also because such instances are rarely found to occur.

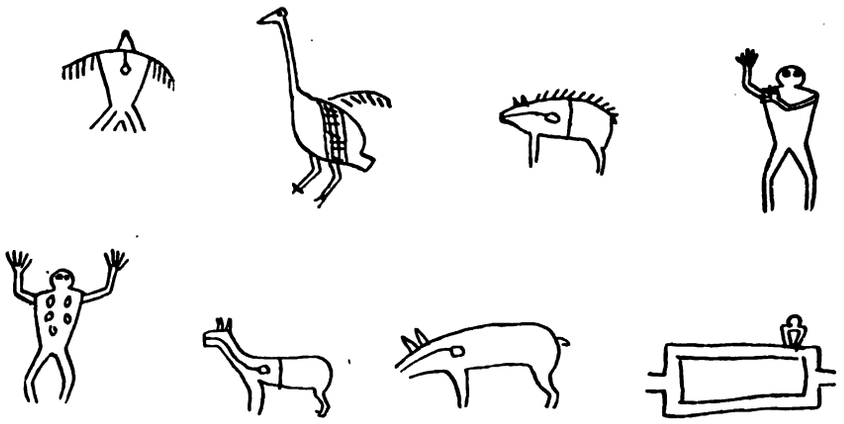


FIG. 38.—Leech Lake Midē' song.

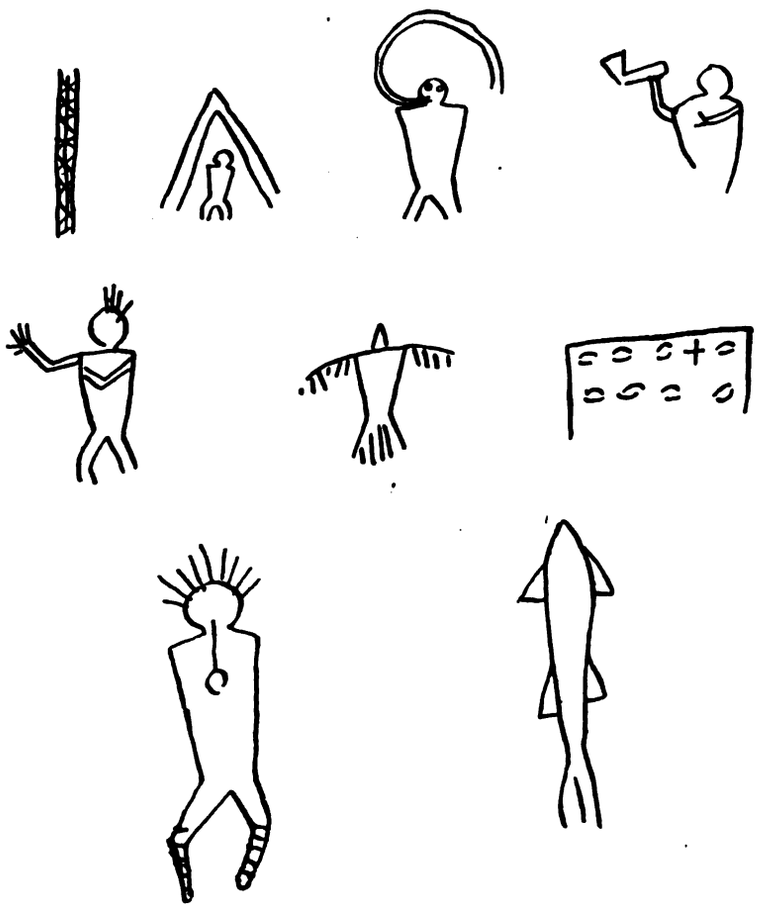


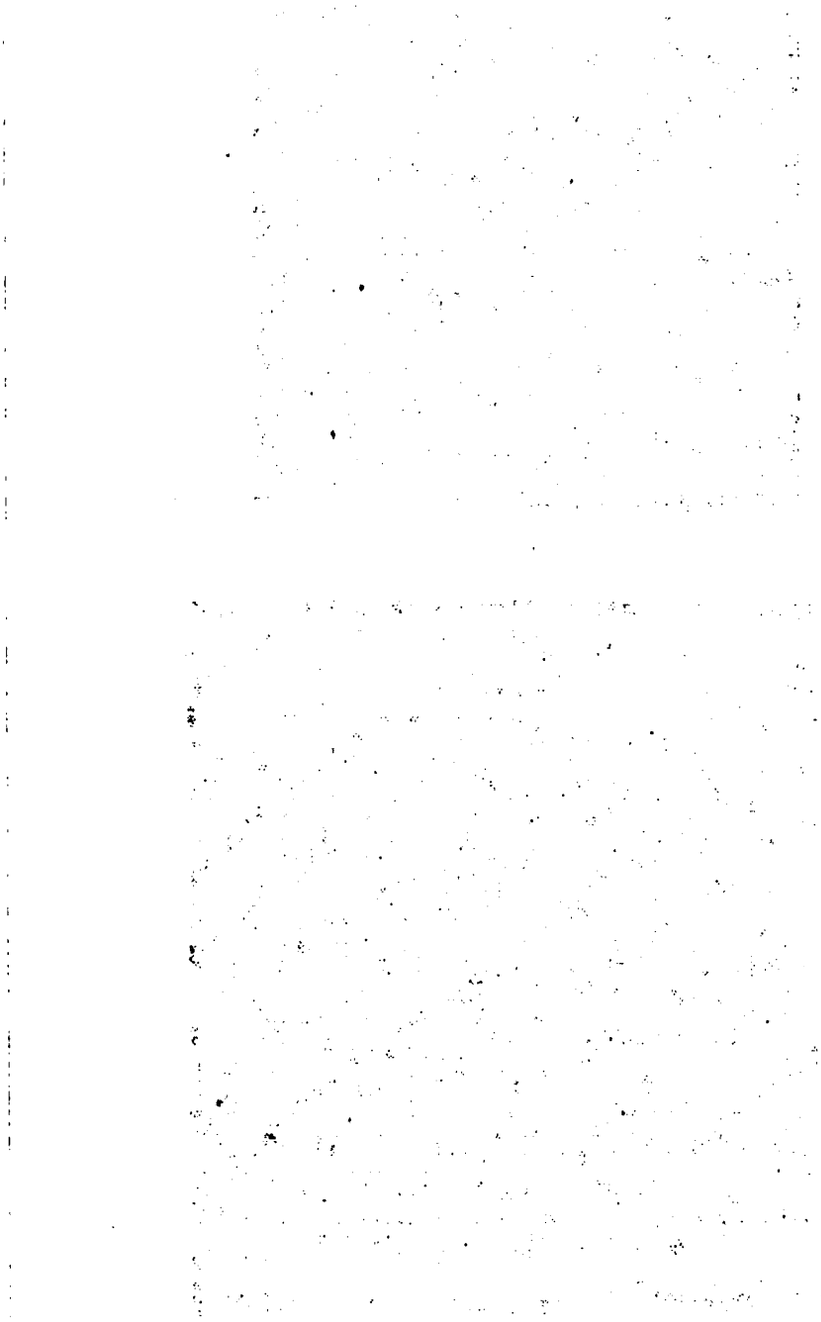
FIG. 39.—Leech Lake Midē' song.

DRESS AND ORNAMENTS.

While it is customary among many tribes of Indians to use as little clothing as possible when engaged in dancing, either of a social or ceremonial nature, the Ojibwa, on the contrary, vie with one another in the attempt to appear in the most costly and gaudy dress attainable. The Ojibwa Midē' priests, take particular pride in their appearance when attending ceremonies of the Midē' Society, and seldom fail to impress this fact upon visitors, as some of the Dakotan tribes, who have adopted similar medicine ceremonies after the custom of their Algonkian neighbors, are frequently without any clothing other than the breechcloth and moccasins, and the armlets and other attractive ornaments. This disregard of dress appears, to the Ojibwa, as a sacrilegious digression from the ancient usages, and it frequently excites severe comment.

Apart from facial ornamentation, of such design as may take the actor's fancy, or in accordance with the degree of which the subject may be a member, the Midē' priests wear shirts, trousers, and moccasins, the first two of which may consist of flannel or cloth and be either plain or ornamented with beads, while the latter are always of buckskin, or, what is more highly prized, moose skin, beaded or worked with colored porcupine quills.

Immediately below each knee is tied a necessary item of an Ojibwa's dress, a garter, which consists of a band of beads varying in different specimens from 2 to 4 inches in width, and from 18 to 20 inches in length, to each end of which strands of colored wool yarn, 2 feet long, are attached so as to admit of being passed around the leg and tied in a bow-knot in front. These garters are made by the women in such patterns as they may be able to design or elaborate. On Pl. XXIII are reproductions of parts of two patterns which are of more than ordinary interest, because of the symbolic signification of the colors and the primitive art design in one, and the substitution of colors and the introduction of modern designs in the other. The upper one consists of green, red, and white beads, the first two colors being in accord with those of one of the degree posts, while the white is symbolical of the mī'gis shell. In the lower illustration is found a substitution of color for the preceding, accounted for by the Midē' informants, who explained that neither of the varieties of beads of the particular color desired could be obtained when wanted. The yellow beads are substituted for white, the blue for green, and the orange and pink for red. The design retains the lozenge form, though in a different arrangement, and the introduction of the blue border is adapted after patterns observed among their white neighbors. In the former is presented also what the Ojibwa term the groundwork or type of their original style of ornamentation, i. e., wavy or gently zigzag lines. Later art work con-



1

2

MIDĒ DANCING GARTERS.

sists chiefly of curved lines, and this has gradually become modified through instruction from the Catholic sisters at various early mission establishments until now, when there has been brought about a common system of working upon cloth or velvet, in patterns, consisting of vines, leaves, and flowers, often exceedingly attractive though not aboriginal in the true sense of the word.

Bands of flannel or buckskin, handsomely beaded, are sometimes attached to the sides of the pantaloons, in imitation of an officer's stripes, and around the bottom. Collars are also used, in addition to necklaces of claws, shells, or other objects.

Armlets and bracelets are sometimes made of bands of beadwork, though brass wire or pieces of metal are preferred.

Bags made of cloth, beautifully ornamented or entirely covered with beads, are worn, supported at the side by means of a broad band or baldric passing over the opposite shoulder. The head is decorated with disks of metal and tufts of colored horse hair or moose hair and with eagle feathers to designate the particular exploits performed by the wearer.

Few emblems of personal valor or exploits are now worn, as many of the representatives of the present generation have never been actively engaged in war, so that there is generally found only among the older members the practice of wearing upon the head eagle feathers bearing indications of significant markings or cuttings. A feather which has been split from the tip toward the middle denotes that the wearer was wounded by an arrow. A red spot as large as a silver dime painted upon a feather shows the wearer to have been wounded by a bullet. The privilege of wearing a feather tipped with red flannel or horse hair dyed red is recognized only when the wearer has killed an enemy, and when a great number have been killed in war the so-called war bonnet is worn, and may consist of a number of feathers exceeding the number of persons killed, the idea to be expressed being "a great number," rather than a specific enumeration.

Although the Ojibwa admit that in former times they had many other specific ways of indicating various kinds of personal exploits, they now have little opportunity of gaining such distinction, and consequently the practice has fallen into desuetude.

FUTURE OF THE SOCIETY.

According to a treaty now being made between the United States Government and the Ojibwa Indians, the latter are to relinquish the several areas of land at present occupied by them and to remove to portions of the Red Lake and White Earth Reservations and take lands in severalty. By this treaty about 4,000,000 acres of land will be ceded to the Government, and the members of the various bands will become citizens of the United States, and thus their tribal ties

will be broken and their primitive customs and rites be abandoned.

The chief Midē' priests, being aware of the momentous consequences of such a change in their habits, and foreseeing the impracticability of much longer continuing the ceremonies of so-called "pagan rites," became willing to impart them to me, in order that a complete description might be made and preserved for the future information of their descendants.

There is scarcely any doubt that these ceremonies will still be secretly held at irregular intervals; but under the watchful care of the national authorities it is doubtful whether they will be performed with any degree of completeness, and it will be but a comparatively short time before the Midē'wiwin will be only a tradition.

THE

SACRED FORMULAS OF THE CHEROKEES.

BY

JAMES MOONEY.

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A'YU"INI (SWIMMER).

SACRED FORMULAS OF THE CHEROKEES.

By James Mooney.

INTRODUCTION.

The sacred formulas here given are selected from a collection of about six hundred, obtained on the Cherokee reservation in North Carolina in 1887 and 1888, and covering every subject pertaining to the daily life and thought of the Indian, including medicine, love, hunting, fishing, war, self-protection, destruction of enemies, witchcraft, the crops, the council, the ball play, etc., and, in fact, embodying almost the whole of the ancient religion of the Cherokees. The original manuscripts, now in the possession of the Bureau of Ethnology, were written by the shamans of the tribe, for their own use, in the Cherokee characters invented by Sikwâ'ya (Sequoyah) in 1821, and were obtained, with the explanations, either from the writers themselves or from their surviving relatives.

Some of these manuscripts are known to be at least thirty years old, and many are probably older. The medical formulas of all kinds constitute perhaps one-half of the whole number, while the love charms come next in number, closely followed by the songs and prayers used in hunting and fishing. The great number of love charms will doubtless be a surprise to those who have been educated in the old theory that the Indian is insensible to the attractions of woman. The comparatively small number of war formulas is explained by the fact that the last war in which the Cherokees, as a tribe, were engaged on their own account, closed with the Revolutionary period, so that these things were well nigh forgotten before the invention of the alphabet, a generation later. The Cherokees who engaged in the Creek war and the late American civil war fought in the interests of the whites, and their leaders were subordinated to white officers, hence there was not the same opportunity for the exercise of shamanistic rites that there would have been had Indians alone been concerned. The prayers for hunting, fishing, and the ball play being in more constant demand, have been better preserved.

These formulas had been handed down orally from a remote antiquity until the early part of the present century, when the invention of the Cherokee syllabary enabled the priests of the tribe to put them into writing. The same invention made it possible for their rivals, the missionaries, to give to the Indians the Bible in their own language, so that the opposing forces of Christianity and shamanism alike profited by the genius of Sikwâya. The pressure of the new civilization was too strong to be withstood, however, and though the prophets of the old religion still have much influence with the people, they are daily losing ground and will soon be without honor in their own country.

Such an exposition of the aboriginal religion could be obtained from no other tribe in North America, for the simple reason that no other tribe has an alphabet of its own in which to record its sacred lore. It is true that the Crees and Micmacs of Canada and the Tukuth of Alaska have so-called alphabets or ideographic systems invented for their use by the missionaries, while, before the Spanish conquest, the Mayas of Central America were accustomed to note down their hero legends and priestly ceremonials in hieroglyphs graven upon the walls of their temples or painted upon tablets made of the leaves of the maguey. But it seems never to have occurred to the northern tribes that an alphabet coming from a missionary source could be used for any other purpose than the transcription of bibles and catechisms, while the sacred books of the Mayas, with a few exceptions, have long since met destruction at the hands of fanaticism, and the modern copies which have come down to the present day are written out from imperfect memory by Indians who had been educated under Spanish influences in the language, alphabet and ideas of the conquerors, and who, as is proved by an examination of the contents of the books themselves, drew from European sources a great part of their material. Moreover, the Maya tablets were so far hieratic as to be understood only by the priests and those who had received a special training in this direction, and they seem therefore to have been entirely unintelligible to the common people.

The Cherokee alphabet, on the contrary, is the invention or adaptation of one of the tribe, who, although he borrowed most of the Roman letters, in addition to the forty or more characters of his own devising, knew nothing of their proper use or value, but reversed them or altered their forms to suit his purpose, and gave them a name and value determined by himself. This alphabet was at once adopted by the tribe for all purposes for which writing can be used, including the recording of their shamanistic prayers and ritualistic ceremonies. The formulas here given, as well as those of the entire collection, were written out by the shamans themselves—men who adhere to the ancient religion and speak only their native language—in order that their sacred knowledge might be preserved in a syste-

matic manner for their mutual benefit. The language, the conception, and the execution are all genuinely Indian, and hardly a dozen lines of the hundreds of formulas show a trace of the influence of the white man or his religion. The formulas contained in these manuscripts are not disjointed fragments of a system long since extinct, but are the revelation of a living faith which still has its priests and devoted adherents, and it is only necessary to witness a ceremonial ball play, with its fasting, its going to water, and its mystic bead manipulation, to understand how strong is the hold which the old faith yet has upon the minds even of the younger generation. The numerous archaic and figurative expressions used require the interpretation of the priests, but, as before stated, the alphabet in which they are written is that in daily use among the common people.

In all tribes that still retain something of their ancient organization we find this sacred knowledge committed to the keeping of various secret societies, each of which has its peculiar ritual with regular initiation and degrees of advancement. From this analogy we may reasonably conclude that such was formerly the case with the Cherokees also, but by the breaking down of old customs consequent upon their long contact with the whites and the voluntary adoption of a civilized form of government in 1827, all traces of such society organization have long since disappeared, and at present each priest or shaman is isolated and independent, sometimes confining himself to a particular specialty, such as love or medicine, or even the treatment of two or three diseases, in other cases broadening his field of operations to include the whole range of mystic knowledge.

It frequently happens, however, that priests form personal friendships and thus are led to divulge their secrets to each other for their mutual advantage. Thus when one shaman meets another who he thinks can probably give him some valuable information, he says to him, "Let us sit down together." This is understood by the other to mean, "Let us tell each other our secrets." Should it seem probable that the seeker after knowledge can give as much as he receives, an agreement is generally arrived at, the two retire to some convenient spot secure from observation, and the first party begins by reciting one of his formulas with the explanations. The other then reciprocates with one of his own, unless it appears that the bargain is apt to prove a losing one, in which case the conference comes to an abrupt ending.

It is sometimes possible to obtain a formula by the payment of a coat, a quantity of cloth, or a sum of money. Like the Celtic Druids of old, the candidate for the priesthood in former times found it necessary to cultivate a long memory, as no formula was repeated more than once for his benefit. It was considered that one who failed to remember after the first hearing was not worthy to be accounted a shaman. This task, however, was not so difficult as might appear on

first thought, when once the learner understood the theory involved, as the formulas are all constructed on regular principles, with constant repetition of the same set of words. The obvious effect of such a regulation was to increase the respect in which this sacred knowledge was held by restricting it to the possession of a chosen few.

Although the written formulas can be read without difficulty by any Cherokee educated in his own language, the shamans take good care that their sacred writings shall not fall into the hands of the laity or of their rivals in occult practices, and in performing the ceremonies the words used are uttered in such a low tone of voice as to be unintelligible even to the one for whose benefit the formula is repeated. Such being the case, it is in order to explain how the formulas collected were obtained.

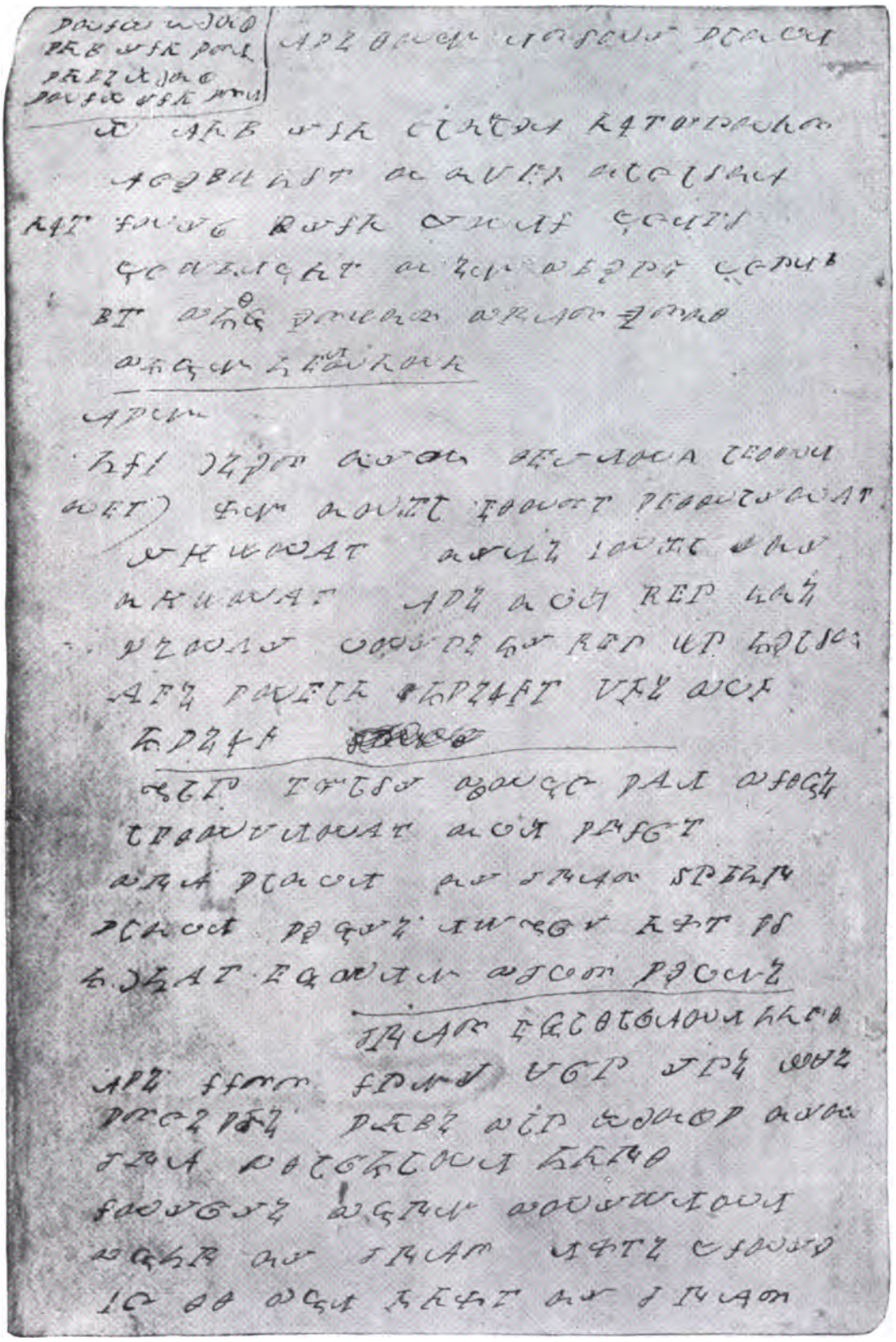
HOW THE FORMULAS WERE OBTAINED.

On first visiting the reservation in the summer of 1887, I devoted considerable time to collecting plants used by the Cherokees for food or medicinal purposes, learning at the same time their Indian names and the particular uses to which each was applied and the mode of preparation. It soon became evident that the application of the medicine was not the whole, and in fact was rather the subordinate, part of the treatment, which was always accompanied by certain ceremonies and "words." From the workers employed at the time no definite idea could be obtained as to the character of these words. One young woman, indeed, who had some knowledge of the subject, volunteered to write the words which she used in her prescriptions, but failed to do so, owing chiefly to the opposition of the half-breed shamans, from whom she had obtained her information.

THE SWIMMER MANUSCRIPT.

Some time afterward an acquaintance was formed with a man named A'yûⁿ'inĭ or "Swimmer," who proved to be so intelligent that I spent several days with him, procuring information in regard to myths and old customs. He told a number of stories in very good style, and finally related the Origin of the Bear[1]. The bears were formerly a part of the Cherokee tribe who decided to leave their kindred and go into the forest. Their friends followed them and endeavored to induce them to return, but the Ani-Tsâ'kahĭ, as they were called, were determined to go. Just before parting from their relatives at the edge of the forest, they turned to them and said, "It is better for you that we should go; but we will teach you songs, and some day when you are in want of food come out to the woods and sing these songs and we shall appear and give you meat." Their

[1] To appear later with the collection of Cherokee myths.



FACSIMILE OF GAHUNI MANUSCRIPT.

Formula for Didûⁿlĕskĭ. (Page 349.)

friends, after learning several songs from them, started back to their homes, and after proceeding a short distance, turned around to take one last look, but saw only a number of bears disappearing in the depths of the forest. The songs which they learned are still sung by the hunter to attract the bears.

When Swimmer had finished the story he was asked if he knew these songs. He replied that he did, but on being requested to sing one he made some excuse and was silent. After some further efforts the interpreter said it would be useless to press the matter then as there were several other Indians present, but that to-morrow we should have him alone with us and could then make another attempt.

The next day Swimmer was told that if he persisted in his refusal it would be necessary to employ some one else, as it was unfair in him to furnish incomplete information when he was paid to tell all he knew. He replied that he was willing to tell anything in regard to stories and customs, but that these songs were a part of his secret knowledge and commanded a high price from the hunters, who sometimes paid as much as $5 for a single song, "because you can't kill any bears or deer unless you sing them."

He was told that the only object in asking about the songs was to put them on record and preserve them, so that when he and the half dozen old men of the tribe were dead the world might be aware how much the Cherokees had known. This appeal to his professional pride proved effectual, and when he was told that a great many similar songs had been sent to Washington by medicine men of other tribes, he promptly declared that he knew as much as any of them, and that he would give all the information in his possession, so that others might be able to judge for themselves who knew most. The only conditions he made were that these secret matters should be heard by no one else but the interpreter, and should not be discussed when other Indians were present.

As soon as the other shamans learned what was going on they endeavored by various means to persuade him to stop talking, or failing in this, to damage his reputation by throwing out hints as to his honesty or accuracy of statement. Among other objections which they advanced was one which, however incomprehensible to a white man, was perfectly intelligible to an Indian, viz: That when he had told everything this information would be taken to Washington and locked up there, and thus they would be deprived of the knowledge. This objection was one of the most difficult to overcome, as there was no line of argument with which to oppose it.

These reports worried Swimmer, who was extremely sensitive in regard to his reputation, and he became restive under the insinuations of his rivals. Finally on coming to work one day he produced a book from under his ragged coat as he entered the house, and said proudly: "Look at that and now see if I don't know something." It

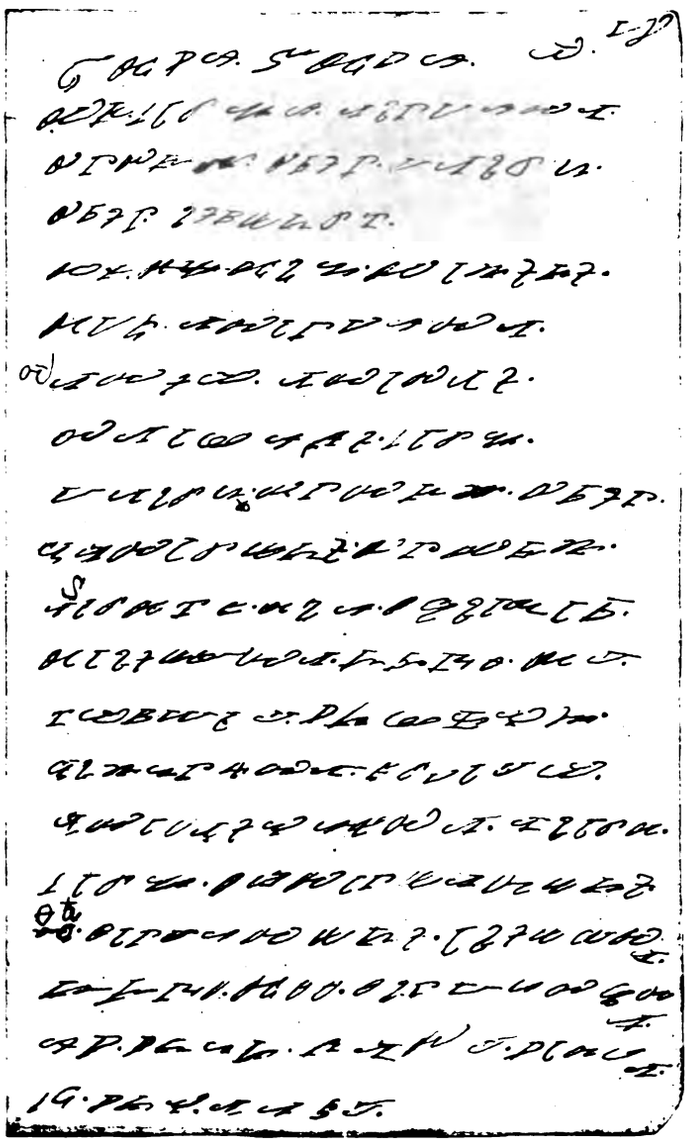
was a small day-book of about 240 pages, procured originally from a white man, and was about half filled with writing in the Cherokee characters. A brief examination disclosed the fact that it contained just those matters that had proved so difficult to procure. Here were prayers, songs, and prescriptions for the cure of all kinds of diseases—for chills, rheumatism, frostbites, wounds, bad dreams, and witchery; love charms, to gain the affections of a woman or to cause her to hate a detested rival; fishing charms, hunting charms—including the songs without which none could ever hope to kill any game; prayers to make the corn grow, to frighten away storms, and to drive off witches; prayers for long life, for safety among strangers, for acquiring influence in council and success in the ball play. There were prayers to the Long Man, the Ancient White, the Great Whirlwind, the Yellow Rattlesnake, and to a hundred other gods of the Cherokee pantheon. It was in fact an Indian ritual and pharmacopœia.

After recovering in a measure from the astonishment produced by this discovery I inquired whether other shamans had such books. "Yes," said Swimmer, "we all have them." Here then was a clew to follow up. A bargain was made by which he was to have another blank book into which to copy the formulas, after which the original was bought. It is now deposited in the library of the Bureau of Ethnology. The remainder of the time until the return was occupied in getting an understanding of the contents of the book.

THE GATIGWANASTI MANUSCRIPT.

Further inquiry elicited the names of several others who might be supposed to have such papers. Before leaving a visit was paid to one of these, a young man named Wilnoti, whose father, Gatigwanasti, had been during his lifetime a prominent shaman, regarded as a man of superior intelligence. Wilnoti, who is a professing Christian, said that his father had had such papers, and after some explanation from the chief he consented to show them. He produced a box containing a lot of miscellaneous papers, testaments, and hymn-books, all in the Cherokee alphabet. Among them was his father's chief treasure, a manuscript book containing 122 pages of foolscap size, completely filled with formulas of the same kind as those contained in Swimmer's book. There were also a large number of loose sheets, making in all nearly 200 foolscap pages of sacred formulas.

On offering to buy the papers, he replied that he wanted to keep them in order to learn and practice these things himself—thus showing how thin was the veneer of Christianity, in his case at least. On representing to him that in a few years the new conditions would render such knowledge valueless with the younger generation, and that even if he retained the papers he would need some one else to explain them to him, he again refused, saying that they might



FACSIMILE OF SWIMMER MANUSCRIPT.

Formula for Daläni Ünagei. (Page 364.)

fall into the hands of Swimmer, who, he was determined, should never see his father's papers. Thus the negotiations came to an end for the time.

On returning to the reservation in July, 1888, another effort was made to get possession of the Gatigwanasti manuscripts and any others of the same kind which could be procured. By this time the Indians had had several months to talk over the matter, and the idea had gradually dawned upon them that instead of taking their knowledge away from them and locking it up in a box, the intention was to preserve it to the world and pay them for it at the same time. In addition the writer took every opportunity to impress upon them the fact that he was acquainted with the secret knowledge of other tribes and perhaps could give them as much as they gave. It was now much easier to approach them, and on again visiting Wilnoti, in company with the interpreter, who explained the matter fully to him, he finally consented to lend the papers for a time, with the same condition that neither Swimmer nor anyone else but the chief and interpreter should see them, but he still refused to sell them. However, this allowed the use of the papers, and after repeated efforts during a period of several weeks, the matter ended in the purchase of the papers outright, with unreserved permission to show them for copying or explanation to anybody who might be selected. Wilnoti was not of a mercenary disposition, and after the first negotiations the chief difficulty was to overcome his objection to parting with his father's handwriting, but it was an essential point to get the originals, and he was allowed to copy some of the more important formulas, as he found it utterly out of the question to copy the whole.

These papers of Gatigwanasti are the most valuable of the whole, and amount to fully one-half the entire collection, about fifty pages consisting of love charms. The formulas are beautifully written in bold Cherokee characters, and the directions and headings are generally explicit, bearing out the universal testimony that he was a man of unusual intelligence and ability, characteristics inherited by his son, who, although a young man and speaking no English, is one of the most progressive and thoroughly reliable men of the band.

THE GAHUNI MANUSCRIPT.

The next book procured was obtained from a woman named Ayâsta, "The Spoiler," and had been written by her husband, Gahuni, who died about 30 years ago. The matter was not difficult to arrange, as she had already been employed on several occasions, so that she understood the purpose of the work, besides which her son had been regularly engaged to copy and classify the manuscripts already procured. The book was claimed as common property by

Ayâsta and her three sons, and negotiations had to be carried on with each one, although in this instance the cash amount involved was only half a dollar, in addition to another book into which to copy some family records and personal memoranda. The book contains only eight formulas, but these are of a character altogether unique, the directions especially throwing a curious light on Indian beliefs. There had been several other formulas of the class called Y'û'ⁿwĕhĭ, to cause hatred between man and wife, but these had been torn out and destroyed by Ayâsta on the advice of an old shaman, in order that her sons might never learn them. In referring to the matter she spoke in a whisper, and it was evident enough that she had full faith in the deadly power of these spells.

In addition to the formulas the book contains about twenty pages of Scripture extracts in the same handwriting, for Gahuni, like several others of their shamans, combined the professions of Indian conjurer and Methodist preacher. After his death the book fell into the hands of the younger members of the family, who filled it with miscellaneous writings and scribblings. Among other things there are about seventy pages of what was intended to be a Cherokee-English pronouncing dictionary, probably written by the youngest son, already mentioned, who has attended school, and who served for some time as copyist on the formulas. This curious Indian production, of which only a few columns are filled out, consists of a list of simple English words and phrases, written in ordinary English script, followed by Cherokee characters intended to give the approximate pronunciation, together with the corresponding word in the Cherokee language and characters. As the language lacks a number of sounds which are of frequent occurrence in English, the attempts to indicate the pronunciation sometimes give amusing results. Thus we find: *Fox* (English script); *kwâgisĭ'* (Cherokee characters); *tsú'lû'* (Cherokee characters). As the Cherokee language lacks the labial *f* and has no compound sound equivalent to our *x*, *kwâgisĭ'* is as near as the Cherokee speaker can come to pronouncing our word *fox*. In the same way "bet" becomes *wĕtĭ*, and "sheep" is *sĭkwĭ*, while "if he has no dog" appears in the disguise of *ikwĭ hâsĭ nâ dâ'ga*.

THE INÂLI MANUSCRIPT.

In the course of further inquiries in regard to the whereabouts of other manuscripts of this kind we heard a great deal about Inâ'lĭ, or "Black Fox," who had died a few years before at an advanced age, and who was universally admitted to have been one of their most able men and the most prominent literary character among them, for from what has been said it must be sufficiently evident that the Cherokees have their native literature and literary men. Like those already mentioned, he was a full-blood Cherokee, speaking no English, and in the course of a long lifetime he had filled almost every

position of honor among his people, including those of councilor, keeper of the townhouse records, Sunday-school leader, conjurer, officer in the Confederate service, and Methodist preacher, at last dying, as he was born, in the ancient faith of his forefathers.

On inquiring of his daughter she stated that her father had left a great many papers, most of which were still in her possession, and on receiving from the interpreter an explanation of our purpose she readily gave permission to examine and make selections from them on condition that the matter should be kept secret from outsiders. A day was appointed for visiting her, and on arriving we found her living in a comfortable log house, built by Inâlĭ himself, with her children and an ancient female relative, a decrepit old woman with snow-white hair and vacant countenance. This was the oldest woman of the tribe, and though now so feeble and childish, she had been a veritable savage in her young days, having carried a scalp in the scalp dance in the Creek war 75 years before.

Having placed chairs for us in the shade Inâlĭ's daughter brought out a small box filled with papers of various kinds, both Cherokee and English. The work of examining these was a tedious business, as each paper had to be opened out and enough of it read to get the general drift of the contents, after which the several classes were arranged in separate piles. While in the midst of this work she brought out another box nearly as large as a small trunk, and on setting it down there was revealed to the astonished gaze such a mass of material as it had not seemed possible could exist in the entire tribe.

In addition to papers of the sort already mentioned there were a number of letters in English from various officials and religious organizations, and addressed to "Enola," to "Rev. Black Fox," and to "Black Fox, Esq," with a large number of war letters written to him by Cherokees who had enlisted in the Confederate service. These latter are all written in the Cherokee characters, in the usual gossipy style common among friends, and several of them contain important historic material in regard to the movements of the two armies in East Tennessee. Among other things was found his certificate as a Methodist preacher, dated in 1848. "Know all men by these presents that Black Fox (Cherokee) is hereby authorized to exercise his Gifts and Graces as a local preacher in M. E. Church South."

There was found a manuscript book in Inâli's handwriting containing the records of the old council of Wolftown, of which he had been secretary for several years down to the beginning of the war. This also contains some valuable materials.

There were also a number of miscellaneous books, papers, and pictures, together with various trinkets and a number of conjuring stones.

In fact the box was a regular curiosity shop, and it was with a feeling akin to despair that we viewed the piles of manuscript which had to be waded through and classified. There was a day's hard work ahead, and it was already past noon; but the woman was not done yet, and after rummaging about inside the house for a while longer she appeared with another armful of papers, which she emptied on top of the others. This was the last straw; and finding it impossible to examine in detail such a mass of material we contented ourselves with picking out the sacred formulas and the two manuscript books containing the town-house records and scriptural quotations and departed.

The daughter of Black Fox agreed to fetch down the other papers in a few days for further examination at our leisure; and she kept her promise, bringing with her at the same time a number of additional formulas which she had not been able to obtain before. A large number of letters and other papers were selected from the miscellaneous lot, and these, with the others obtained from her, are now deposited also with the Bureau of Ethnology. Among other things found at this house were several beads of the old shell wampum, of whose use the Cherokees have now lost even the recollection. She knew only that they were very old and different from the common beads, but she prized them as talismans, and firmly refused to part with them.

OTHER MANUSCRIPTS.

Subsequently a few formulas were obtained from an old shaman named Tsiskwa or "Bird," but they were so carelessly written as to be almost worthless, and the old man who wrote them, being then on his dying bed, was unable to give much help in the matter. However, as he was anxious to tell what he knew an attempt was made to take down some formulas from his dictation. A few more were obtained in this way but the results were not satisfactory and the experiment was abandoned. About the same time A'wani'ta or "Young Deer," one of their best herb doctors, was engaged to collect the various plants used in medicine and describe their uses. While thus employed he wrote in a book furnished him for the purpose a number of formulas used by him in his practice, giving at the same time a verbal explanation of the theory and ceremonies. Among these was one for protection in battle, which had been used by himself and a number of other Cherokees in the late war. Another doctor named Takwati'hĭ or "Catawba Killer," was afterward employed on the same work and furnished some additional formulas which he had had his son write down from his dictation, he himself being unable to write. His knowledge was limited to the practice of a few specialties, but in regard to these his informa-

tion was detailed and accurate. There was one for bleeding with the cupping horn. All these formulas obtained from Tsiskwa, A'wanita, and Takwtihi are now in possession of the Bureau.

THE KANÂHETA ANI-TSALAGI ETI.

Among the papers thus obtained was a large number which for various reasons it was found difficult to handle or file for preservation. Many of them had been written so long ago that the ink had almost faded from the paper; others were written with lead pencil, so that in handling them the characters soon became blurred and almost illegible; a great many were written on scraps of paper of all shapes and sizes; and others again were full of omissions and doublets, due to the carelessness of the writer, while many consisted simply of the prayer, with nothing in the nature of a heading or prescription to show its purpose.

Under the circumstances it was deemed expedient to have a number of these formulas copied in more enduring form. For this purpose it was decided to engage the services of Ayâsta's youngest son, an intelligent young man about nineteen years of age, who had attended school long enough to obtain a fair acquaintance with English in addition to his intimate knowledge of Cherokee. He was also gifted with a ready comprehension, and from his mother and uncle Tsiskwa had acquired some familiarity with many of the archaic expressions used in the sacred formulas. He was commonly known as "Will West," but signed himself W. W. Long, Long being the translation of his father's name, Gûnahi'ta. After being instructed as to how the work should be done with reference to paragraphing, heading, etc., he was furnished a blank book of two hundred pages into which to copy such formulas as it seemed desirable to duplicate. He readily grasped the idea and in the course of about a month, working always under the writer's personal supervision, succeeded in completely filling the book according to the plan outlined. In addition to the duplicate formulas he wrote down a number of dance and drinking songs, obtained originally from A'yû^{n}'inI, with about thirty miscellaneous formulas obtained from various sources. The book thus prepared is modeled on the plan of an ordinary book, with headings, table of contents, and even with an illuminated title page devised by the aid of the interpreter according to the regular Cherokee idiomatic form, and is altogether a unique specimen of Indian literary art. It contains in all two hundred and fifty-eight formulas and songs, which of course are native aboriginal productions, although the mechanical arrangement was performed under the direction of a white man. This book also, under its Cherokee title, *Kanâhe'ta Ani-Tsa'lagi E'ti* or "Ancient Cherokee Formulas," is now in the library of the Bureau.

There is still a considerable quantity of such manuscript in the

hands of one or two shamans with whom there was no cnance for negotiating, but an effort will be made to obtain possession of these on some future visit, should opportunity present. Those now in the Bureau library comprised by far the greater portion of the whole quantity held by the Indians, and as only a small portion of this was copied by the owners it can not be duplicated by any future collector.

CHARACTER OF THE FORMULAS—THE CHEROKEE RELIGION.

It is impossible to overestimate the ethnologic importance of the materials thus obtained. They are invaluable as the genuine production of the Indian mind, setting forth in the clearest light the state of the aboriginal religion before its contamination by contact with the whites. To the psychologist and the student of myths they are equally precious. In regard to their linguistic value we may quote the language of Brinton, speaking of the sacred books of the Mayas, already referred to:

> Another value they have, * * * and it is one which will be properly appreciated by any student of languages. They are, by common consent of all competent authorities, the genuine productions of native minds, cast in the idiomatic forms of the native tongue by those born to its use. No matter how fluent a foreigner becomes in a language not his own, he can never use it as does one who has been familiar with it from childhood. This general maxim is tenfold true when we apply it to a European learning an American language. The flow of thought, as exhibited in these two linguistic families, is in such different directions that no amount of practice can render one equally accurate in both. Hence the importance of studying a tongue as it is employed by natives; and hence the very high estimate I place on these "Books of Chilan Balam" as linguistic material—an estimate much increased by the great rarity of independent compositions in their own tongues by members of the native races of this continent.[1]

The same author, in speaking of the internal evidences of authenticity contained in the Popol Vuh, the sacred book of the Kichés, uses the following words, which apply equally well to these Cherokee formulas:

> To one familiar with native American myths, this one bears undeniable marks of its aboriginal origin. Its frequent puerilities and inanities, its generally low and coarse range of thought and expression, its occasional loftiness of both, its strange metaphors and the prominence of strictly heathen names and potencies, bring it into unmistakable relationship to the true native myth.[2]

These formulas furnish a complete refutation of the assertion so frequently made by ignorant and prejudiced writers that the Indian had no religion excepting what they are pleased to call the meaningless mummeries of the medicine man. This is the very reverse of the truth. The Indian is essentially religious and contemplative,

[1] Brinton, D. G.: The books of Chilan Balam 10, Philadelphia, n. d., (1882).

[2] Brinton, D. G: Names of the Gods in the Kiche Myths, in Proc. Am. Philos. Soc., Philadelphia, 1881, vol. 19, p. 613.

and it might almost be said that every act of his life is regulated and determined by his religious belief. It matters not that some may call this superstition. The difference is only relative. The religion of to-day has developed from the cruder superstitions of yesterday, and Christianity itself is but an outgrowth and enlargement of the beliefs and ceremonies which have been preserved by the Indian in their more ancient form. When we are willing to admit that the Indian has a religion which he holds sacred, even though it be different from our own, we can then admire the consistency of the theory, the particularity of the ceremonial and the beauty of the expression. So far from being a jumble of crudities, there is a wonderful completeness about the whole system which is not surpassed even by the ceremonial religions of the East. It is evident from a study of these formulas that the Cherokee Indian was a polytheist and that the spirit world was to him only a shadowy counterpart of this. All his prayers were for temporal and tangible blessings—for health, for long life, for success in the chase, in fishing, in war and in love, for good crops, for protection and for revenge. He had no Great Spirit, no happy hunting ground, no heaven, no hell, and consequently death had for him no terrors and he awaited the inevitable end with no anxiety as to the future. He was careful not to violate the rights of his tribesman or to do injury to his feelings, but there is nothing to show that he had any idea whatever of what is called morality in the abstract.

As the medical formulas are first in number and importance it may be well, for the better understanding of the theory involved, to give the Cherokee account of

THE ORIGIN OF DISEASE AND MEDICINE.

In the old days quadrupeds, birds, fishes, and insects could all talk, and they and the human race lived together in peace and friendship. But as time went on the people increased so rapidly that their settlements spread over the whole earth and the poor animals found themselves beginning to be cramped for room. This was bad enough, but to add to their misfortunes man invented bows, knives, blowguns, spears, and hooks, and began to slaughter the larger animals, birds and fishes for the sake of their flesh or their skins, while the smaller creatures, such as the frogs and worms, were crushed and trodden upon without mercy, out of pure carelessness or contempt. In this state of affairs the animals resolved to consult upon measures for their common safety.

The bears were the first to meet in council in their townhouse in Kuwa'hĭ, the "Mulberry Place,"[1] and the old White Bear chief pre-

[1] One of the high peaks of the Smoky Mountains, on the Tennessee line, near Clingman's Dome.

sided. After each in turn had made complaint against the way in which man killed their friends, devoured their flesh and used their skins for his own adornment, it was unanimously decided to begin war at once against the human race. Some one asked what weapons man used to accomplish their destruction. "Bows and arrows, of course," cried all the bears in chorus. "And what are they made of?" was the next question. "The bow of wood and the string of our own entrails," replied one of the bears. It was then proposed that they make a bow and some arrows and see if they could not turn man's weapons against himself. So one bear got a nice piece of locust wood and another sacrificed himself for the good of the rest in order to furnish a piece of his entrails for the string. But when everything was ready and the first bear stepped up to make the trial it was found that in letting the arrow fly after drawing back the bow, his long claws caught the string and spoiled the shot. This was annoying, but another suggested that he could overcome the difficulty by cutting his claws, which was accordingly done, and on a second trial it was found that the arrow went straight to the mark. But here the chief, the old White Bear, interposed and said that it was necessary that they should have long claws in order to be able to climb trees. "One of us has already died to furnish the bow-string, and if we now cut off our claws we shall all have to starve together. It is better to trust to the teeth and claws which nature has given us, for it is evident that man's weapons were not intended for us."

No one could suggest any better plan, so the old chief dismissed the council and the bears dispersed to their forest haunts without having concerted any means for preventing the increase of the human race. Had the result of the council been otherwise, we should now be at war with the bears, but as it is the hunter does not even ask the bear's pardon when he kills one.

The deer next held a council under their chief, the Little Deer, and after some deliberation resolved to inflict rheumatism upon every hunter who should kill one of their number, unless he took care to ask their pardon for the offense. They sent notice of their decision to the nearest settlement of Indians and told them at the same time how to make propitiation when necessity forced them to kill one of the deer tribe. Now, whenever the hunter brings down a deer, the Little Deer, who is swift as the wind and can not be wounded, runs quickly up to the spot and bending over the blood stains asks the spirit of the deer if it has heard the prayer of the hunter for pardon. If the reply be "Yes" all is well and the Little Deer goes on his way, but if the reply be in the negative he follows on the trail of the hunter, guided by the drops of blood on the ground, until he arrives at the cabin in the settlement, when the Little Deer enters invisibly and strikes the neglectful hunter with rheumatism, so that

he is rendered on the instant a helpless cripple. No hunter who has regard for his health ever fails to ask pardon of the deer for killing it, although some who have not learned the proper formula may attempt to turn aside the Little Deer from his pursuit by building a fire behind them in the trail.

Next came the fishes and reptiles, who had their own grievances against humanity. They held a joint council and determined to make their victims dream of snakes twining about them in slimy folds and blowing their fetid breath in their faces, or to make them dream of eating raw or decaying fish, so that they would lose appetite, sicken, and die. Thus it is that snake and fish dreams are accounted for.

Finally the birds, insects, and smaller animals came together for a like purpose, and the Grubworm presided over the deliberations. It was decided that each in turn should express an opinion and then vote on the question as to whether or not man should be deemed guilty. Seven votes were to be sufficient to condemn him. One after another denounced man's cruelty and injustice toward the other animals and voted in favor of his death. The Frog (walâ'sĭ) spoke first and said: "We must do something to check the increase of the race or people will become so numerous that we shall be crowded from off the earth. See how man has kicked me about because I'm ugly, as he says, until my back is covered with sores;" and here he showed the spots on his skin. Next came the Bird (tsi'skwa; no particular species is indicated), who condemned man because "he burns my feet off," alluding to the way in which the hunter barbecues birds by impaling them on a stick set over the fire, so that their feathers and tender feet are singed and burned. Others followed in the same strain. The Ground Squirrel alone ventured to say a word in behalf of man, who seldom hurt him because he was so small; but this so enraged the others that they fell upon the Ground Squirrel and tore him with their teeth and claws, and the stripes remain on his back to this day.

The assembly then began to devise and name various diseases, one after another, and had not their invention finally failed them not one of the human race would have been able to survive. The Grubworm in his place of honor hailed each new malady with delight, until at last they had reached the end of the list, when some one suggested that it be arranged so that menstruation should sometimes prove fatal to woman. On this he rose up in his place and cried: "Wata'ⁿ! Thanks! I'm glad some of them will die, for they are getting so thick that they tread on me." He fairly shook with joy at the thought, so that he fell over backward and could not get on his feet again, but had to wriggle off on his back, as the Grubworm has done ever since.

When the plants, who were friendly to man, heard what had been

done by the animals, they determined to defeat their evil designs. Each tree, shrub, and herb, down even to the grasses and mosses, agreed to furnish a remedy for some one of the diseases named, and each said: "I shall appear to help man when he calls upon me in his need." Thus did medicine originate, and the plants, every one of which has its use if we only knew it, furnish the antidote to counteract the evil wrought by the revengeful animals. When the doctor is in doubt what treatment to apply for the relief of a patient, the spirit of the plant suggests to him the proper remedy.

THEORY OF DISEASE—ANIMALS, GHOSTS, WITCHES.

Such is the belief upon which their medical practice is based, and whatever we may think of the theory it must be admitted that the practice is consistent in all its details with the views set forth in the myth. Like most primitive people the Cherokees believe that disease and death are not natural, but are due to the evil influence of animal spirits, ghosts, or witches. Haywood, writing in 1823, states on the authority of two intelligent residents of the Cherokee nation:

> In ancient times the Cherokees had no conception of anyone dying a natural death. They universally ascribed the death of those who perished by disease to the intervention or agency of evil spirits and witches and conjurers who had connection with the Shina (Anisgi'na) or evil spirits. * * * A person dying by disease and charging his death to have been procured by means of witchcraft or spirits, by any other person, consigns that person to inevitable death. They profess to believe that their conjurations have no effect upon white men.[1]

On the authority of one of the same informants, he also mentions the veneration which "their physicians have for the numbers four and seven, who say that after man was placed upon the earth four and seven nights were instituted for the cure of diseases in the human body and the seventh night as the limit for female impurity."[2]

Viewed from a scientific standpoint, their theory and diagnosis are entirely wrong, and consequently we can hardly expect their therapeutic system to be correct. As the learned Doctor Berendt states, after an exhaustive study of the medical books of the Mayas, the scientific value of their remedies is "next to nothing." It must be admitted that many of the plants used in their medical practice possess real curative properties, but it is equally true that many others held in as high estimation are inert. It seems probable that in the beginning the various herbs and other plants were regarded as so many fetiches and were selected from some fancied connection with the disease animal, according to the idea known to modern folklorists as the doctrine of signatures. Thus at the present day the doctor puts into the decoction intended as a vermifuge some of the

[1] Haywood, John: Natural and Aboriginal History of East Tennessee, 267–8, Nashville, 1823.

[2] Ibid., p. 281.

red fleshy stalks of the common purslane or chickweed (Portulaca oleracea), because these stalks somewhat resemble worms and consequently must have some occult influence over worms. Here the chickweed is a fetich precisely as is the flint arrow head which is put into the same decoction, in order that in the same mysterious manner its sharp cutting qualities may be communicated to the liquid and enable it to cut the worms into pieces. In like manner, biliousness is called by the Cherokees dalâ'nĭ or "yellow," because the most apparent symptom of the disease is the vomiting by the patient of the yellow bile, and hence the doctor selects for the decoction four different herbs, each of which is also called dalânĭ, because of the color of the root, stalk, or flower. The same idea is carried out in the tabu which generally accompanies the treatment. Thus a scrofulous patient must abstain from eating the meat of a turkey, because the fleshy dewlap which depends from its throat somewhat resembles an inflamed scrofulous eruption. On killing a deer the hunter always makes an incision in the hind quarter and removes the hamstring, because this tendon, when severed, draws up into the flesh; ergo, any one who should unfortunately partake of the hamstring would find his limbs draw up in the same manner.

There can be no doubt that in course of time a haphazard use of plants would naturally lead to the discovery that certain herbs are efficacious in certain combinations of symptoms. These plants would thus come into more frequent use and finally would obtain general recognition in the Indian materia medica. By such a process of evolution an empiric system of medicine has grown up among the Cherokees, by which they are able to treat some classes of ailments with some degree of success, although without any intelligent idea of the process involved. It must be remembered that our own medical system has its remote origin in the same mythic conception of disease, and that within two hundred years judicial courts have condemned women to be burned to death for producing sickness by spells and incantations, while even at the present day our faith-cure professors reap their richest harvest among people commonly supposed to belong to the intelligent classes. In the treatment of wounds the Cherokee doctors exhibit a considerable degree of skill, but as far as any internal ailment is concerned the average farmer's wife is worth all the doctors in the whole tribe.

The faith of the patient has much to do with his recovery, for the Indian has the same implicit confidence in the shaman that a child has in a more intelligent physician. The ceremonies and prayers are well calculated to inspire this feeling, and the effect thus produced upon the mind of the sick man undoubtedly reacts favorably upon his physical organization.

The following list of twenty plants used in Cherokee practice will give a better idea of the extent of their medical knowledge than

could be conveyed by a lengthy dissertation. The names are given in the order in which they occur in the botanic notebook filled on the reservation, excluding names of food plants and species not identified, so that no attempt has been made to select in accordance with a preconceived theory. Following the name of each plant are given its uses as described by the Indian doctors, together with its properties as set forth in the United States Dispensatory, one of the leading pharmacopœias in use in this country.[1] For the benefit of those not versed in medical phraseology it may be stated that aperient, cathartic, and deobstruent are terms applied to medicines intended to open or purge the bowels, a diuretic has the property of exciting the flow of urine, a diaphoretic excites perspiration, and a demulcent protects or soothes irritated tissues, while hæmoptysis denotes a peculiar variety of blood-spitting and aphthous is an adjective applied to ulcerations in the mouth.

SELECTED LIST OF PLANTS USED.

1. UNASTE'TSTIYÛ="very small root"—Aristolochia serpentaria—Virginia or black snakeroot: Decoction of root blown upon patient for fever and feverish headache, and drunk for coughs; root chewed and spit upon wound to cure snake bites; bruised root placed in hollow tooth for toothache, and held against nose made sore by constant blowing in colds. Dispensatory: "A stimulant tonic, acting also as a diaphoretic or diuretic, according to the mode of its application; * * * also been highly recommended in intermittent fevers. and though itself generally inadequate to the cure often proves serviceable as an adjunct to Peruvian bark or sulphate of quinia." Also used for typhous diseases, in dyspepsia, as a gargle for sore throat, as a mild stimulant in typhoid fevers, and to promote eruptions. The genus derives its scientific name from its supposed efficacy in promoting menstrual discharge, and some species have acquired the "reputation of antidotes for the bites of serpents."
2. UNISTIL'Û"ISTÎ'[2]="they stick on"—Cynoglossum Morrisoni—Beggar lice: Decoction of root or top drunk for kidney troubles; bruised root used with bear oil as an ointment for cancer; forgetful persons drink a decoction of this plant, and probably also of other similar bur plants, from an idea that the sticking qualities of the burs will thus be imparted to the memory. From a similar connection of ideas the root is also used in the preparation of love charms. Dispensatory: Not named. C. officinale "has been used as a demulcent and sedative in coughs, catarrh, spitting of blood, dysentery, and diarrhea, and has been also applied externally in burns, ulcers, scrofulous tumors and goiter."

[1] Wood, T. B., and Bache, F.: Dispensatory of the United States of America, 14th ed., Philadelphia, 1877.

[2] The Cherokee plant names here given are generic names, which are the names commonly used. In many cases the same name is applied to several species and it is only when it is necessary to distinguish between them that the Indians use what might be called specific names. Even then the descriptive term used serves to distinguish only the particular plants under discussion and the introduction of another variety bearing the same generic name would necessitate a new classification of species on a different basis, while hardly any two individuals would classify the species by the same characteristics.

3. Û"NAGÉI= olack"—Cassia Marilandica—Wild senna: Root bruised and moistened with water for poulticing sores; decoction drunk for fever and for a disease also called û"nage'i, or "black" (same name as plant), in which the hands and eye sockets are said to turn black; also for a disease described as similar to û"nagei, but more dangerous, in which the eye sockets become black, while black spots appear on the arms, legs, and over the ribs on one side of the body, accompanied by partial paralysis, and resulting in death should the black spots appear also on the other side. Dispensatory: Described as "an efficient and safe cathartic, * * * most conveniently given in the form of infusion."

4. KÂSD'ÚTA="simulating ashes," so called on account of the appearance of the leaves—Gnaphalium decurrens—Life everlasting: Decoction drunk for colds; also used in the sweat bath for various diseases and considered one of their most valuable medical plants. Dispensatory: Not named. Decoctions of two other species of this genus are mentioned as used by country people for chest and bowel diseases, and for hemorrhages, bruises, ulcers, etc., although "probably possessing little medicinal virtue."

5. ALTSA'STI=|"a wreath for the head"—Vicia Caroliniana—Vetch: Decoction drunk for dyspepsia and pains in the back, and rubbed on stomach for cramp; also rubbed on ball-players after scratching, to render their muscles tough, and used in the same way after scratching in the disease referred to under û"nagei. in which one side becomes black in spots, with partial paralysis; also used in same manner in decoction with Kâsduta for rheumatism; considered one of their most valuable medicinal herbs. Dispensatory: Not named.

6. DISTAI'YĬ="they (the roots) are tough"—Tephrosia Virginiana—Catgut, Turkey Pea, Goat's Rue, or Devil's Shoestrings: Decoction drunk for lassitude. Women wash their hair in decoction of its roots to prevent its breaking or falling out, because these roots are very tough and hard to break; from the same idea ball-players rub the decoction on their limbs after scratching, to toughen them. Dispensatory: Described as a cathartic with roots tonic and aperient.

7. U'GA-ATASGI'SKĬ="the pus oozes out"—Euphorbia hypericifolia—Milkweed: Juice rubbed on for skin eruptions, especially on children's heads; also used as a purgative; decoction drunk for gonorrhœa and similar diseases in both sexes, and held in high estimation for this purpose; juice used as an ointment for sores and for sore nipples, and in connection with other herbs for cancer. Dispensatory: The juice of all of the genus has the property of "powerfully irritating the skin when applied to it," while nearly all are powerful emetics and cathartics. This species "has been highly commended as a remedy in dysentery after due depletion, diarrhea, menorrhagia, and leucorrhea."

8. GÛ'NĬGWALĬ'SKĬ="It becomes discolored when bruised"—Scutellaria lateriflora—Skullcap. "The name refers to the red juice which comes out of the stalk when bruised or chewed. A decoction of the four varieties of Gûnigwalĭ'skĭ—S. lateriflora, S. pilosa, Hypericum corymbosum, and Stylosanthes elatior—is drunk to promote menstruation, and the same decoction is also drunk and used as a wash to counteract the ill effects of eating food prepared by a woman in the menstrual condition, or when such a woman by chance comes into a sick room or a house under the tabu; also drunk for diarrhea and used with other herbs in decoction for breast pains. Dispensatory: This plant "produces no very obvious effects," but some doctors regard it as possessed of nervine, antispasmodic and tonic properties. None of the other three species are named.

9. KÂ'GA SKÛ'ⁿTAGĪ="crow shin"—Adiantum pedatum—Maidenhair Fern: Used either in decoction or poultice for rheumatism and chills, generally in connection with some other fern. The doctors explain that the fronds of the different varieties of fern are curled up in the young plant, but unroll and straighten out as it grows, and consequently a decoction of ferns causes the contracted muscles of the rheumatic patient to unbend and straighten out in like manner. It is also used in decoction for fever. Dispensatory: The leaves "have been supposed to be useful in chronic catarrh and other pectoral affections."
10. ANDA'NKALAGI'SKĪ="it removes things from the gums"—Geranium maculatum—Wild Alum, Cranesbill: Used in decoction with Yânû Unihye'stĭ (Vitis cordifolia) to wash the mouths of children in thrush; also used alone for the same purpose by blowing the chewed fiber into the mouth. Dispensatory: "One of our best indigenous astringents. * * * Diarrhea, chronic dysentery, cholora infantum in the latter stages, and the various hemorrhages are the forms of disease in which it is most commonly used." Also valuable as "an application to indolent ulcers, an injection in gleet and leucorrhea, a gargle in relaxation of the uvula and aphthous ulcerations of the throat." The other plant sometimes used with it is not mentioned.
11. Û'ⁿLĔ UKĬ'LTĪ="the locust frequents it"—Gillenia trifoliata—Indian Physic. Two doctors state that it is good as a tea for bowel complaints, with fever and yellow vomit; but another says that it is poisonous and that no decoction is ever drunk, but that the beaten root is a good poultice for swellings. Dispensatory: "Gillenia is a mild and efficient emetic, and like most substances belonging to the same class occasionally acts upon the bowels. In very small doses it has been thought to be tonic."
12. SKWA'LĬ=Hepatica acutiloba—Liverwort, Heartleaf: Used for coughs either in tea or by chewing root. Those who dream of snakes drink a decoction of this herb and I'natû Ga'n'ka="snake tongue" (Camptosorus rhizophyllus or Walking Fern) to produce vomiting, after which the dreams do not return. The traders buy large quantities of liverwort from the Cherokees, who may thus have learned to esteem it more highly than they otherwise would. The appearance of the other plant, Camptosorus rhizophyllus, has evidently determined its Cherokee name and the use to which it is applied. Dispensatory: "Liverwort is a very mild demulcent tonic and astringent, supposed by some to possess diuretic and deobstruent virtues. It was formerly used in Europe in various complaints, especially chronic hepatic affections, but has fallen into entire neglect. In this country, some years since, it acquired considerable reputation, which, however, it has not maintained as a remedy in hæmoptysis and chronic coughs." The other plant is not named.
13. DA'YEWÛ="it sews itself up," because the leaves are said to grow together again when torn—Cacalia atriplicifolia—Tassel Flower: Held in great repute as a poultice for cuts, bruises, and cancer, to draw out the blood or poisonous matter. The bruised leaf is bound over the spot and frequently removed. The dry powdered leaf was formerly used to sprinkle over food like salt. Dispensatory: Not named.
14. Â'TALI KÛLĬ'="it climbs the mountain."—Aralia quinquefolia—Ginseng or "Sang:" Decoction of root drunk for headache, cramps, etc., and for female troubles; chewed root blown on spot for pains in the side. The Cherokees sell large quantities of sang to the traders for 50 cents per pound, nearly equivalent there to two days' wages, a fact which has doubtless increased their idea of its importance. Dispensatory: "The extraordinary medical virtues formerly ascribed to ginseng had no other existence than in the imagination of the Chinese. It is little more than a demulcent, and in this

country is not employed as a medicine." The Chinese name, ginseng, is said to refer to the fancied resemblance of the root to a human figure, while in the Cherokee formulas it is addressed as the "great man" or "little man," and this resemblance no doubt has much to do with the estimation in which it is held by both peoples.

15. Û'TSATĬ UWADSĬSKA="fish scales," from shape of leaves—Thalictrum anemonoides—Meadow Rue: Decoction of root drunk for diarrhea with vomiting. Dispensatory: Not named.

16. K'KWĔ ULASU'LA="partridge moccasin"—Cypripedium parviflorum—Lady-slipper: Decoction of root used for worms in children. In the liquid are placed some stalks of the common chickweed or purslane (Cerastium vulgatum) which, from the appearance of its red fleshy stalks, is supposed to have some connection with worms. Dispensatory: Described as "a gentle nervous stimulant" useful in diseases in which the nerves are especially affected. The other herb is not named.

17. A'HAWĬ' AKĂ'TĂ'—"deer eye," from the appearance of the flower—Rudbeckia fulgida—Cone Flower: Decoction of root drunk for flux and for some private diseases; also used as a wash for snake bites and swellings caused by (mythic) tsgâya or worms; also dropped into weak or inflamed eyes. This last is probably from the supposed connection between the eye and the flower resembling the eye. Dispensatory: Not named.

18. UTĬSTUGĬ'—Polygonatum multiflorum latifolium—Solomon's Seal: Root heated and bruised and applied as a poultice to remove an ulcerating swelling called tu'stĭ', resembling a boil or carbuncle. Dispensatory: This species acts like P. uniflorum, which is said to be emetic. In former times it was used externally in bruises, especially those about the eyes, in tumors, wounds, and cutaneous eruptions and was highly esteemed as a cosmetic. At present it is not employed, though recommended by Hermann as a good remedy in gout and rheumatism." This species in decoction has been found to produce "nausea, a cathartic effect and either diaphoresis or diuresis," and is useful "as an internal remedy in piles, and externally in the form of decoction, in the affection of the skin resulting from the poisonous exhalations of certain plants."

19. ĂMĂDITA'TĬ="water dipper," because water can be sucked up through its hollow stalk—Eupatorium purpureum—Queen of the Meadow, Gravel Root: Root used in decoction with a somewhat similar plant called Ămădítá'tĭ û'tanu, or "large water dipper" (not identified) for difficult urination. Dispensatory: "Said to operate as a diuretic. Its vulgar name of gravel root indicates the popular estimation of its virtues." The genus is described as tonic, diaphoretic, and in large doses emetic and aperient.

20. YÂNA UTSĔSTA="the bear lies on it"—Aspidium acrostichoides—Shield Fern: Root decoction drunk to produce vomiting, and also used to rub on the skin, after scratching, for rheumatism—in both cases some other plant is added to the decoction; the warm decoction is also held in the mouth to relieve toothache. Dispensatory: Not named.

The results obtained from a careful study of this list may be summarized as follows: Of the twenty plants described as used by the Cherokees, seven (Nos. 2, 4, 5, 13, 15, 17, and 20) are not noticed in the Dispensatory even in the list of plants sometimes used although regarded as not officinal. It is possible that one or two of these seven plants have medical properties, but this can hardly be true of a larger number unless we are disposed to believe that the Indians

are better informed in this regard than the best educated white physicians in the country. Two of these seven plants, however (Nos. 2 and 4), belong to genera which seem to have some of the properties ascribed by the Indians to the species. Five others of the list (Nos. 8, 9, 11, 14, and 16) are used for entirely wrong purposes, taking the Dispensatory as authority, and three of these are evidently used on account of some fancied connection between the plant and the disease, according to the doctrine of signatures. Three of the remainder (Nos. 1, 3, and 6) may be classed as uncertain in their properties, that is, while the plants themselves seem to possess some medical value, the Indian mode of application is so far at variance with recognized methods, or their own statements are so vague and conflicting, that it is doubtful whether any good can result from the use of the herbs. Thus the Unaste'tstiyû, or Virginia Snakeroot, is stated by the Dispensatory to have several uses, and among other things is said to have been highly recommended in intermittent fevers, although alone it is "generally inadequate to the cure." Though not expressly stated, the natural inference is that it must be applied internally, but the Cherokee doctor, while he also uses it for fever, takes the decoction in his mouth and blows it over the head and shoulders of the patient. Another of these, the Distai'yĭ, or Turkey Pea, is described in the Dispensatory as having roots tonic and aperient. The Cherokees drink a decoction of the roots for a feeling of weakness and languor, from which it might be supposed that they understood the tonic properties of the plant had not the same decoction been used by the women as a hair wash, and by the ball players to bathe their limbs, under the impression that the toughness of the roots would thus be communicated to the hair or muscles. From this fact and from the name of the plant, which means at once hard, tough, or strong, it is quite probable that its roots are believed to give strength to the patient solely because they themselves are so strong and not because they have been proved to be really efficacious. The remaining five plants have generally pronounced medicinal qualities, and are used by the Cherokees for the very purposes for which, according to the Dispensatory, they are best adapted; so that we must admit that so much of their practice is correct, however false the reasoning by which they have arrived at this result.

MEDICAL PRACTICE.

Taking the Dispensatory as the standard, and assuming that this list is a fair epitome of what the Cherokees know concerning the medical properties of plants, we find that five plants, or 25 per cent of the whole number, are correctly used; twelve, or 60 per cent, are presumably either worthless or incorrectly used, and three plants, or 15 per cent, are so used that it is difficult to say whether they are

of any benefit or not. Granting that two of these three produce good results as used by the Indians, we should have 35 per cent, or about one-third of the whole, as the proportion actually possessing medical virtues, while the remaining two-thirds are inert, if not positively injurious. It is not probable that a larger number of examples would change the proportion to any appreciable extent. A number of herbs used in connection with these principal plants may probably be set down as worthless, inasmuch as they are not named in the Dispensatory.

The results here arrived at will doubtless be a surprise to those persons who hold that an Indian must necessarily be a good doctor, and that the medicine man or conjurer, with his theories of ghosts, witches, and revengeful animals, knows more about the properties of plants and the cure of disease than does the trained botanist or physician who has devoted a lifetime of study to the patient investigation of his specialty, with all the accumulated information contained in the works of his predecessors to build upon, and with all the light thrown upon his pathway by the discoveries of modern science. It is absurd to suppose that the savage, a child in intellect, has reached a higher development in any branch of science than has been attained by the civilized man, the product of long ages of intellectual growth. It would be as unreasonable to suppose that the Indian could be entirely ignorant of the medicinal properties of plants, living as he did in the open air in close communion with nature; but neither in accuracy nor extent can his knowledge be compared for a moment with that of the trained student working upon scientific principles.

Cherokee medicine is an empiric development of the fetich idea. For a disease caused by the rabbit the antidote must be a plant called "rabbit's food," "rabbit's ear," or "rabbit's tail;" for snake dreams the plant used is "snake's tooth;" for worms a plant resembling a worm in appearance, and for inflamed eyes a flower having the appearance and name of "deer's eye." A yellow root must be good when the patient vomits yellow bile, and a black one when dark circles come about his eyes, and in each case the disease and the plant alike are named from the color. A decoction of burs must be a cure for forgetfulness, for there is nothing else that will stick like a bur; and a decoction of the wiry roots of the "devil's shoestrings" must be an efficacious wash to toughen the ballplayer's muscles, for they are almost strong enough to stop the plowshare in the furrow. It must be evident that under such a system the failures must far outnumber the cures, yet it is not so long since half our own medical practice was based upon the same idea of correspondences, for the mediæval physicians taught that *similia similibus curantur*, and have we not all heard that "the hair of the dog will cure the bite?"

Their ignorance of the true medical principles involved is shown by the regulations prescribed for the patient. With the exception of the fasting, no sanitary precautions are taken to aid in the recovery of the sick man or to contribute to his comfort. Even the fasting is as much religious as sanative, for in most cases where it is prescribed the doctor also must abstain from food until sunset, just as in the Catholic church both priest and communicants remain fasting from midnight until after the celebration of the divine mysteries. As the Indian cuisine is extremely limited, no delicate or appetizing dishes are prepared for the patient, who partakes of the same heavy, sodden cornmeal dumplings and bean bread which form his principal food in health. In most cases certain kinds of food are prohibited, such as squirrel meat, fish, turkey, etc.; but the reason is not that such food is considered deleterious to health, as we understand it, but because of some fanciful connection with the disease spirit. Thus if squirrels have caused the illness the patient must not eat squirrel meat. If the disease be rheumatism, he must not eat the leg of any animal, because the limbs are generally the seat of this malady. Lye, salt, and hot food are always forbidden when there is any prohibition at all; but here again, in nine cases out of ten, the regulation, instead of being beneficial, serves only to add to his discomfort. Lye enters into almost all the food preparations of the Cherokees, the alkaline potash taking the place of salt, which is seldom used among them, having been introduced by the whites. Their bean and chestnut bread, cornmeal dumplings, hominy, and gruel are all boiled in a pot, all contain lye, and are all, excepting the last, served up hot from the fire. When cold their bread is about as hard and tasteless as a lump of yesterday's dough, and to condemn a sick man to a diet of such dyspeptic food, eaten cold without even a pinch of salt to give it a relish, would seem to be sufficient to kill him without any further aid from the doctor. The salt or lye so strictly prohibited is really a tonic and appetizer, and in many diseases acts with curative effect. So much for the health regimen.

In serious cases the patient is secluded and no strangers are allowed to enter the house. On first thought this would appear to be a genuine sanitary precaution for the purpose of securing rest and quiet to the sick man. Such, however, is not the case. The necessity for quiet has probably never occurred to the Cherokee doctor, and this regulation is intended simply to prevent any direct or indirect contact with a woman in a pregnant or menstrual condition. Among all primitive nations, including the ancient Hebrews, we find an elaborate code of rules in regard to the conduct and treatment of women on arriving at the age of puberty, during pregnancy and the menstrual periods, and at childbirth. Among the Cherokees the presence of a woman under any of these conditions, or even the presence of any one who has come from a house where such a woman

resides, is considered to neutralize all the effects of the doctor's treatment. For this reason all women, excepting those of the household, are excluded. A man is forbidden to enter, because he may have had intercourse with a tabued woman, or may have come in contact with her in some other way; and children also are shut out, because they may have come from a cabin where dwells a woman subject to exclusion. What is supposed to be the effect of the presence of a menstrual woman in the family of the patient is not clear; but judging from analogous customs in other tribes and from rules still enforced among the Cherokees, notwithstanding their long contact with the whites, it seems probable that in former times the patient was removed to a smaller house or temporary bark lodge built for his accommodation whenever the tabu as to women was prescribed by the doctor. Some of the old men assert that in former times sick persons were removed to the public townhouse, where they remained under the care of the doctors until they either recovered or died. A curious instance of this prohibition is given in the second Didû^{n}lĕ'skĭ (rheumatism) formula from the Gahuni manuscript (see page 350), where the patient is required to abstain from touching a squirrel, a dog, a cat, a mountain trout, or a woman, and must also have a chair appropriated to his use alone during the four days that he is under treatment.

In cases of the children's disease known as Gû^{n}wani'gista'ĭ (see formulas) it is forbidden to carry the child outdoors, but this is not to procure rest for the little one, or to guard against exposure to cold air, but because the birds send this disease, and should a bird chance to be flying by overhead at the moment the flapping of its wings would *fan the disease back* into the body of the patient.

ILLUSTRATION OF THE TABU.

On a second visit to the reservation the writer once had a practical illustration of the gaktû'^{n}ta or tabu, which may be of interest as showing how little sanitary ideas have to do with these precautions. Having received several urgent invitations from Tsiskwa (Bird), an old shaman of considerable repute, who was anxious to talk, but confined to his bed by sickness, it was determined to visit him at his house, several miles distant. On arriving we found another doctor named Sû'^{n}kĭ (The Mink) in charge of the patient and were told that he had just that morning begun a four days' gaktû^{n}ta, which, among other provisions, excluded all visitors. It was of no use to argue that we had come by the express request of Tsiskwa. The laws of the gaktû'^{n}ta were as immutable as those of the Medes and Persians, and neither doctor nor patient could hope for favorable results from the treatment unless the regulations were enforced to the letter. But although we might not enter the house, there was no reason why we should not talk to the old man, so seats were placed for us outside the door, while Tsiskwa lay stretched out on

the bed just inside and The Mink perched himself on the fence a few yards distant to keep an eye on the proceedings. As there was a possibility that a white man might unconsciously affect the operation of the Indian medicine, the writer deemed it advisable to keep out of sight altogether, and accordingly took up a position just around the corner of the house, but within easy hearing distance, while the interpreter sat facing the doorway within a few feet of the sick man inside. Then began an animated conversation, Tsiskwa inquiring, through the interpreter, as to the purpose of the Government in gathering such information, wanting to know how we had succeeded with other shamans and asking various questions in regard to other tribes and their customs. The replies were given in the same manner, an attempt being also made to draw him out as to the extent of his own knowledge. Thus we talked until the old man grew weary, but throughout the whole of this singular interview neither party saw the other, nor was the gaktú'ⁿta violated by entering the house. From this example it must be sufficiently evident that the tabu as to visitors is not a hygienic precaution for securing greater quiet to the patient, or to prevent the spread of contagion, but that it is simply a religious observance of the tribe, exactly parallel to many of the regulations among the ancient Jews, as laid down in the book of Leviticus.

NEGLECT OF SANITARY REGULATIONS.

No rules are ever formulated as to fresh air or exercise, for the sufficient reason that the door of the Cherokee log cabin is always open, excepting at night and on the coldest days in winter, while the Indian is seldom in the house during his waking hours unless when necessity compels him. As most of their cabins are still built in the old Indian style, without windows, the open door furnishes the only means by which light is admitted to the interior, although when closed the fire on the hearth helps to make amends for the deficiency. On the other hand, no precautions are taken to guard against cold, dampness, or sudden drafts. During the greater part of the year whole families sleep outside upon the ground, rolled up in an old blanket. The Cherokee is careless of exposure and utterly indifferent to the simplest rules of hygiene. He will walk all day in a pouring rain clad only in a thin shirt and a pair of pants. He goes barefoot and frequently bareheaded nearly the entire year, and even on a frosty morning in late November, when the streams are of almost icy coldness, men and women will deliberately ford the river where the water is waist deep in preference to going a few hundred yards to a foot-log. At their dances in the open air men, women, and children, with bare feet and thinly clad, dance upon the damp ground from darkness until daylight, sometimes enveloped in a thick mountain fog which makes even the neighboring treetops invisible,

while the mothers have their infants laid away under the bushes with only a shawl between them and the cold ground. In their ball plays also each young man, before going into the game, is subjected to an ordeal of dancing, bleeding, and cold plunge baths, without food or sleep, which must unquestionably waste his physical energy.

In the old days when the Cherokee was the lord of the whole country from the Savannah to the Ohio, well fed and warmly clad and leading an active life in the open air, he was able to maintain a condition of robust health notwithstanding the incorrectness of his medical ideas and his general disregard of sanitary regulations. But with the advent of the white man and the destruction of the game all this was changed. The East Cherokee of to-day is a dejected being; poorly fed, and worse clothed, rarely tasting meat, cut off from the old free life, and with no incentive to a better, and constantly bowed down by a sense of helpless degradation in the presence of his conqueror. Considering all the circumstances, it may seem a matter of surprise that any of them are still in existence. As a matter of fact, the best information that could be obtained in the absence of any official statistics indicated a slow but steady decrease during the last five years. Only the constitutional vigor, inherited from their warrior ancestors, has enabled them to sustain the shock of the changed conditions of the last half century. The uniform good health of the children in the training school shows that the case is not hopeless, however, and that under favorable conditions, with a proper food supply and a regular mode of living, the Cherokee can hold his own with the white man.

THE SWEAT BATH—BLEEDING—RUBBING—BATHING.

In addition to their herb treatment the Cherokees frequently resort to sweat baths, bleeding, rubbing, and cold baths in the running stream, to say nothing of the beads and other conjuring paraphernalia generally used in connection with the ceremony. The sweat bath was in common use among almost all the tribes north of Mexico excepting the central and eastern Eskimo, and was considered the great cure-all in sickness and invigorant in health. Among many tribes it appears to have been regarded as a ceremonial observance, but the Cherokees seem to have looked upon it simply as a medical application, while the ceremonial part was confined to the use of the plunge bath. The person wishing to make trial of the virtues of the sweat bath entered the â'sĭ, a small earth-covered log house only high enough to allow of sitting down. After divesting himself of his clothing, some large bowlders, previously heated in a fire, were placed near him, and over them was poured a decoction of the beaten roots of the wild parsnip. The door was closed so that no air could enter from the outside, and the patient sat in the sweltering steam

finger, or of the fishes in the water. Although the old customs are fast dying out this ceremony is never neglected at the ball play, and is also strictly observed by many families on occasion of eating the new corn, at each new moon, and on other special occasions, even when it is necessary to break the ice in the stream for the purpose, and to the neglect of this rite the older people attribute many of the evils which have come upon the tribe in later days. The latter part of autumn is deemed the most suitable season of the year for this ceremony, as the leaves which then cover the surface of the stream are supposed to impart their medicinal virtues to the water.

SHAMANS AND WHITE PHYSICIANS.

Of late years, especially since the establishment of schools among them, the Cherokees are gradually beginning to lose confidence in the abilities of their own doctors and are becoming more disposed to accept treatment from white physicians. The shamans are naturally jealous of this infringement upon their authority and endeavor to prevent the spread of the heresy by asserting the convenient doctrine that the white man's medicine is inevitably fatal to an Indian unless eradicated from the system by a continuous course of treatment for four years under the hands of a skillful shaman. The officers of the training school established by the Government a few years ago met with considerable difficulty on this account for some time, as the parents insisted on removing the children at the first appearance of illness in order that they might be treated by the shamans, until convinced by experience that the children received better attention at the school than could possibly be had in their own homes. In one instance, where a woman was attacked by a pulmonary complaint akin to consumption, her husband, a man of rather more than the usual amount of intelligence, was persuaded to call in the services of a competent white physician, who diagnosed the case and left a prescription. On a second visit, a few days later, he found that the family, dreading the consequences of this departure from old customs, had employed a shaman, who asserted that the trouble was caused by a sharpened stick which some enemy had caused to be imbedded in the woman's side. He accordingly began a series of conjurations for the removal of the stick, while the white physician and his medicine were disregarded, and in due time the woman died. Two children soon followed her to the grave, from the contagion or the inherited seeds of the same disease, but here also the sharpened sticks were held responsible, and, notwithstanding the three deaths under such treatment, the husband and father, who was at one time a preacher, still has faith in the assertions of the shaman. The appointment of a competent physician to look after the health of the Indians would go far to eradicate these false ideas and prevent

much sickness and suffering; but, as the Government has made no such provision, the Indians, both on and off the reservation, excepting the children in the home school, are entirely without medical care.

MEDICINE DANCES.

The Cherokees have a dance known as the Medicine Dance, which is generally performed in connection with other dances when a number of people assemble for a night of enjoyment. It possesses no features of special interest and differs in no essential respect from a dozen other of the lesser dances. Besides this, however, there was another, known as the Medicine Boiling Dance, which, for importance and solemn ceremonial, was second only to the great Green Corn Dance. It has now been discontinued on the reservation for about twenty years. It took place in the fall, probably preceding the Green Corn Dance, and continued four days. The principal ceremony in connection with it was the drinking of a strong decoction of various herbs, which acted as a violent emetic and purgative. The usual fasting and going to water accompanied the dancing and medicine-drinking.

DESCRIPTION OF SYMPTOMS.

It is exceedingly difficult to obtain from the doctors any accurate statement of the nature of a malady, owing to the fact that their description of the symptoms is always of the vaguest character, while in general the name given to the disease by the shaman expresses only his opinion as to the occult cause of the trouble. Thus they have definite names for rheumatism, toothache, boils, and a few other ailments of like positive character, but beyond this their description of symptoms generally resolves itself into a statement that the patient has bad dreams, looks black around the eyes, or feels tired, while the disease is assigned such names as "when they dream of snakes," "when they dream of fish," "when ghosts trouble them," "when something is making something else eat them," or "when the food is changed," i. e., when a witch causes it to sprout and grow in the body of the patient or transforms it into a lizard, frog, or sharpened stick.

THE PAY OF THE SHAMAN.

The consideration which the doctor receives for his services is called ugista'ʻtĭ, a word of doubtful etymology, but probably derived from the verb tsĭ'giû, "I take" or "I eat." In former times this was generally a deer-skin or a pair of moccasins, but is now a certain quantity of cloth, a garment, or a handkerchief. The shamans disclaim the idea that the ugistâ'ʻtĭ is pay, in our sense of the word, but assert that it is one of the agencies in the removal and banishment of the disease spirit. Their explanation is somewhat obscure, but

the cloth seems to be intended either as an offering to the disease spirit, as a ransom to procure the release of his intended victim, or as a covering to protect the hand of a shaman while engaged in pulling the disease from the body of the patient. The first theory, which includes also the idea of vicarious atonement, is common to many primitive peoples. Whichever may be the true explanation, the evil influence of the disease is believed to enter into the cloth, which must therefore be sold or given away by the doctor, as otherwise it will cause his death when the pile thus accumulating reaches the height of his head. No evil results seem to follow its transfer from the shaman to a third party. The doctor can not bestow anything thus received upon a member of his own family unless that individual gives him something in return. If the consideration thus received, however, be anything eatable, the doctor may partake along with the rest of the family. As a general rule the doctor makes no charge for his services, and the consideration is regarded as a free-will offering. This remark applies only to the medical practice, as the shaman always demands and receives a fixed remuneration for performing love charms, hunting ceremonials, and other conjurations of a miscellaneous character. Moreover, whenever the beads are used the patient must furnish a certain quantity of new cloth upon which to place them, and at the close of the ceremony the doctor rolls up the cloth, beads and all, and takes them away with him. The cloth thus received by the doctor for working with the beads must not be used by him, but must be sold. In one instance a doctor kept a handkerchief which he received for his services, but instead sold a better one of his own. Additional cloth is thus given each time the ceremony is repeated, each time a second four days' course of treatment is begun, and as often as the doctor sees fit to change his method of procedure. Thus, when he begins to treat a sick man for a disease caused by rabbits, he expects to receive a certain ugista'ʻtĭ; but, should he decide after a time that the terrapin or the red bird is responsible for the trouble, he adopts a different course of treatment, for which another ugista'ʻtĭ is necessary. Should the sickness not yield readily to his efforts, it is because the disease animal requires a greater ugista'ʻtĭ, and the quantity of cloth must be doubled, so that on the whole the doctrine is a very convenient one for the shaman. In many of the formulas explicit directions are given as to the pay which the shaman is to receive for performing the ceremony. In one of the Gatigwanasti formulas, after specifying the amount of cloth to be paid, the writer ot it makes the additional proviso that it must be "pretty good cloth, too," asserting as a clincher that "this is what the old folks said a long time ago."

The ugista'ʻtĭ can not be paid by either one of a married couple to the other, and, as it is considered a necessary accompaniment of the application, it follows that a shaman can not treat his own wife in

sickness, and vice versa. Neither can the husband or wife of the sick person send for the doctor, but the call must come from some one of the blood relatives of the patient. In one instance within the writer's knowledge a woman complained that her husband was very sick and needed a doctor's attention, but his relatives were taking no steps in the matter and it was not permissible for her to do so.

CEREMONIES FOR GATHERING PLANTS AND PREPARING MEDICINE.

There are a number of ceremonies and regulations observed in connection with the gathering of the herbs, roots, and barks, which can not be given in detail within the limits of this paper. In searching for his medicinal plants the shaman goes provided with a number of white and red beads, and approaches the plant from a certain direction, going round it from right to left one or four times, reciting certain prayers the while. He then pulls up the plant by the roots and drops one of the beads into the hole and covers it up with the loose earth. In one of the formulas for hunting ginseng the hunter addresses the mountain as the "Great Man" and assures it that he comes only to take a small piece of flesh (the ginseng) from its side, so that it seems probable that the bead is intended as a compensation to the earth for the plant thus torn from her bosom. In some cases the doctor must pass by the first three plants met until he comes to the fourth, which he takes and may then return for the others. The bark is always taken from the east side of the tree, and when the root or branch is used it must also be one which runs out toward the east, the reason given being that these have imbibed more medical potency from the rays of the sun.

When the roots, herbs, and barks which enter into the prescription have been thus gathered the doctor ties them up into a convenient package, which he takes to a running stream and casts into the water with appropriate prayers. Should the package float, as it generally does, he accepts the fact as an omen that his treatment will be successful. On the other hand, should it sink, he concludes that some part of the preceding ceremony has been improperly carried out and at once sets about procuring a new package, going over the whole performance from the beginning. Herb-gathering by moonlight, so important a feature in European folk medicine, seems to be no part of Cherokee ceremonial. There are fixed regulations in regard to the preparing of the decoction, the care of the medicine during the continuance of the treatment, and the disposal of what remains after the treatment is at an end. In the arrangement of details the shaman frequently employs the services of a lay assistant. In these degenerate days a number of upstart pretenders to the healing art have arisen in the tribe and endeavor to impose upon the ignorance of their fellows by posing as doctors, although knowing

next to nothing of the prayers and ceremonies, without which there can be no virtue in the application. These impostors are sternly frowned down and regarded with the utmost contempt by the real professors, both men and women, who have been initiated into the sacred mysteries and proudly look upon themselves as conservators of the ancient ritual of the past.

THE CHEROKEE GODS AND THEIR ABIDING PLACES.

After what has been said in elucidation of the theories involved in the medical formulas, the most important and numerous of the series, but little remains to be added in regard to the others, beyond what is contained in the explanation accompanying each one. A few points, however, may be briefly noted.

The religion of the Cherokees, like that of most of our North American tribes, is zootheism or animal worship, with the survival of that earlier stage designated by Powell as hecastotheism, or the worship of all things tangible, and the beginnings of a higher system in which the elements and the great powers of nature are deified. Their pantheon includes gods in the heaven above, on the earth beneath, and in the waters under the earth, but of these the animal gods constitute by far the most numerous class, although the elemental gods are more important. Among the animal gods insects and fishes occupy a subordinate place, while quadrupeds, birds, and reptiles are invoked almost constantly. The uktena (a mythic great horned serpent), the rattlesnake, and the terrapin, the various species of hawk, and the rabbit, the squirrel, and the dog are the principal animal gods. The importance of the god bears no relation to the size of the animal, and in fact the larger animals are but seldom invoked. The spider also occupies a prominent place in the love and life-destroying formulas, his duty being to entangle the soul of his victim in the meshes of his web or to pluck it from the body of the doomed man and drag it way to the black coffin in the Darkening Land.

Among what may be classed as elemental gods the principal are fire, water, and the sun, all of which are addressed under figurative names. The sun is called Une'ʻlanû'hĭ, "the apportioner," just as our word moon means originally "the measurer." Indians and Aryans alike, having noticed how these great luminaries divide and measure day and night, summer and winter, with never-varying regularity, have given to each a name which should indicate these characteristics, thus showing how the human mind constantly moves on along the same channels. Missionaries have naturally, but incorrectly, assumed this apportioner of all things to be the suppositional "Great Spirit" of the Cherokees. and hence the word is used in the Bible translation as synonymous with God. In ordinary conversation and in the lesser myths the sun is called

Nû'ⁿtâ. The sun is invoked chiefly by the ball-player, while the hunter prays to the fire; but every important ceremony—whether connected with medicine, love, hunting, or the ball play—contains a prayer to the "Long Person," the formulistic name for water, or, more strictly speaking, for the river. The wind, the storm, the cloud, and the frost are also invoked in different formulas.

But few inanimate gods are included in the category, the principal being the Stone, to which the shaman prays while endeavoring to find a lost article by means of a swinging pebble suspended by a string; the Flint, invoked when the shaman is about to scarify the patient with a flint arrow-head before rubbing on the medicine; and the Mountain, which is addressed in one or two of the formulas thus far translated. Plant gods do not appear prominently, the chief one seeming to be the ginseng, addressed in the formulas as the "Great Man" or "Little Man," although its proper Cherokee name signifies the "Mountain Climber."

A number of personal deities are also invoked, the principal being the Red Man. He is one of the greatest of the gods, being repeatedly called upon in formulas of all kinds, and is hardly subordinate to the Fire, the Water, or the Sun. His identity is as yet uncertain, but he seems to be intimately connected with the Thunder family. In a curious marginal note in one of the Gahuni formulas (page 350), it is stated that when the patient is a woman the doctor must pray to the Red Man, but when treating a man he must pray to the Red Woman, so that this personage seems to have dual sex characteristics. Another god invoked in the hunting songs is Tsu'l'kalû', or "Slanting Eyes" (see Cherokee Myths), a giant hunter who lives in one of the great mountains of the Blue Ridge and owns all the game. Others are the Little Men, probably the two Thunder boys; the Little People, the fairies, who live in the rock cliffs; and even the De'tsata, a diminutive sprite who holds the place of our Puck. One unwritten formula, which could not be obtained correctly by dictation, was addressed to the "Red-Headed Woman, whose hair hangs down to the ground."

The personage invoked is always selected in accordance with the theory of the formula and the duty to be performed. Thus, when a sickness is caused by a fish, the Fish-hawk, the Heron, or some other fish-eating bird is implored to come and seize the intruder and destroy it, so that the patient may find relief. When the trouble is caused by a worm or an insect, some insectivorous bird is called in for the same purpose. When a flock of redbirds is pecking at the vitals of the sick man the Sparrow-hawk is brought down to scatter them, and when the rabbit, the great mischief-maker, is the evil genius, he is driven out by the Rabbit-hawk. Sometimes after the intruder has been thus expelled "a small portion still remains," in the words of the formula, and accordingly the Whirlwind is called

down from the treetops to carry the remnant to the uplands and there scatter it so that it shall never reappear. The hunter prays to the fire, from which he draws his omens; to the reed, from which he makes his arrows; to Tsu'l'kalû, the great lord of the game, and finally addresses in songs the very animals which he intends to kill. The lover prays to the Spider to hold fast the affections of his beloved one in the meshes of his web, or to the Moon, which looks down upon him in the dance. The warrior prays to the Red War-club, and the man about to set out on a dangerous expedition prays to the Cloud to envelop him and conceal him from his enemies.

Each spirit of good or evil has its distinct and appropriate place of residence. The Rabbit is declared to live in the broomsage on the hillside, the Fish dwells in a bend of the river under the pendant hemlock branches, the Terrapin lives in the great pond in the West, and the Whirlwind abides in the leafy treetops. Each disease animal, when driven away from his prey by some more powerful animal, endeavors to find shelter in his accustomed haunt. It must be stated here that the animals of the formulas are not the ordinary, everyday animals, but their great progenitors, who live in the upper world (galû'ⁿlati) above the arch of the firmament.

COLOR SYMBOLISM.

Color symbolism plays an important part in the shamanistic system of the Cherokees, no less than in that of other tribes. Each one of the cardinal points has its corresponding color and each color its symbolic meaning, so that each spirit invoked corresponds in color and local habitation with the characteristics imputed to him, and is connected with other spirits of the same name, but of other colors, living in other parts of the upper world and differing widely in their characteristics. Thus the Red Man, living in the east, is the spirit of power, triumph, and success, but the Black Man, in the West, is the spirit of death. The shaman therefore invokes the Red Man to the assistance of his client and consigns his enemy to the fatal influences of the Black Man.

The symbolic color system of the Cherokees, which will be explained more fully in connection with the formulas, is as follows:

East = red = success; triumph.
North = blue = defeat; trouble.
West = black = death.
South = white = peace; happiness.
Above?= brown = unascertained, but propitious.
—— = yellow = about the same as blue.

There is a great diversity in the color systems of the various tribes, both as to the location and significance of the colors, but for obvious reasons black was generally taken as the symbol of death, while white and red signified, respectively, peace and war. It is somewhat

remarkable that red was the emblem of power and triumph among the ancient Oriental nations no less than among the modern Cherokees.[1]

IMPORTANCE ATTACHED TO NAMES.

In many of the formulas, especially those relating to love and to life-destroying, the shaman mentions the name and clan of his client, of the intended victim, or of the girl whose affections it is desired to win. The Indian regards his name, not as a mere label, but as a distinct part of his personality, just as much as are his eyes or his teeth, and believes that injury will result as surely from the malicious handling of his name as from a wound inflicted on any part of his physical organism. This belief was found among the various tribes from the Atlantic to the Pacific, and has occasioned a number of curious regulations in regard to the concealment and change of names. It may be on this account that both Powhatan and Pocahontas are known in history under assumed appellations, their true names having been concealed from the whites until the pseudonyms were too firmly established to be supplanted. Should his prayers have no apparent effect when treating a patient for some serious illness, the shaman sometimes concludes that the name is affected, and accordingly goes to water, with appropriate ceremonies, and christens the patient with a new name, by which he is henceforth to be known. He then begins afresh, repeating the formulas with the new name selected for the patient, in the confident hope that his efforts will be crowned with success.

LANGUAGE OF THE FORMULAS.

A few words remain to be said in regard to the language of the formulas. They are full of archaic and figurative expressions, many of which are unintelligible to the common people, and some of which even the shamans themselves are now unable to explain. These archaic forms, like the old words used by our poets, lend a peculiar beauty which can hardly be rendered in a translation. They frequently throw light on the dialectic evolution of the language, as many words found now only in the nearly extinct Lower Cherokee dialect occur in formulas which in other respects are written in the Middle or Upper dialect. The R sound, the chief distinguishing characteristic of the old Lower dialect, of course does not occur, as there are no means of indicating it in the Cherokee syllabary. Those who are accustomed to look to the Bible for all beauty in sacred

[1] For more in regard to color symbolism, see Mallery's Pictographs of the North American Indians in Fourth Report of the Bureau of Ethnology, pp. 53–57, Washington, 1886; Gatschet's Creek Migration Legend, vol. 2, pp. 31–41, St. Louis, 1888; Brinton's Kiche Myths in Proceedings of the American Philosophical Society, vol. 19, pp. 646–647, Philadelphia, 1882.

expression will be surprised to find that these formulas abound in the loftiest flights of poetic imagery. This is especially true of the prayers used to win the love of a woman or to destroy the life of an enemy, in which we find such expressions as—"Now your soul fades away—your spirit shall grow less and dwindle away, never to reappear;" "Let her be completely veiled in loneliness—O Black Spider, may you hold her soul in your web, so that it may never get through the meshes;" and the final declaration of the lover, "Your soul has come into the very center of my soul, never to turn away."

In the translation it has been found advisable to retain as technical terms a few words which could not well be rendered literally, such as ada'wĕhĭ and ugistā''tĭ. These words will be found explained in the proper place. Transliterations of the Cherokee text of the formulas are given, but it must be distinctly understood that the translations are intended only as free renderings of the spirit of the originals, exact translations with grammatic and glossarial notes being deferred until a more extended study of the language has been made, when it is hoped to present with more exactness of detail the whole body of the formulas, of which the specimens here given are but a small portion.

The facsimile formulas are copies from the manuscripts now in possession of the Bureau of Ethnology, and the portraits are from photographs taken by the author in the field.

SPECIMEN FORMULAS.

NOTE ON THE ORTHOGRAPHY AND TRANSLATION.

In the Cherokee text both *d* and *g* have a medial sound, approximating the sounds of *t* and *k* respectively. The other letters are pronounced in regular accordance with the alphabet of the Bureau of Ethnology. The language abounds in nasal and aspirate sounds, the most difficult of the latter being the aspirate *'l*, which to one familiar only with English sounds like *tl*.

A few words whose meaning could not be satisfactorily ascertained have been distinctively indicated in the Cherokee text by means of italics. In the translation the corresponding expression has been queried, or the space left entirely blank. On examining the text the student can not fail to be struck by the great number of verbs ending in *iga*. This is a peculiar form hardly ever used excepting in these formulas, where almost every paragraph contains one or more such verbs. It implies that the subject has just come and is now performing the action, and that he came for that purpose. In addition to this, many of these verbs may be either assertive or imperative (expressing entreaty), according to the accent. Thus *hatû'ˢgani'ga* means "you have just come and are listening and it is for that purpose you came." By slightly accenting the final syllable it becomes "come at once to listen." It will thus be seen that the great majority of the formulas are declarative rather than petitional in form—laudatory rhapsodies instead of prayers, in the ordinary sense of the word.

MEDICINE.

DIDÛ"LĔ'SKĬ ADANÛ"WÂTĬ KANÂHĔ'SKĬ.

Sgĕ! Ha-Nû"dâgû'"yĭ tsûl'dâ'histĭ, Gi''lĭ Gigage'ĭ, hanâ'gwa hatû'"gani'ga usĭnuli'yu. Hida'wĕhi-gâgû', gahu'stĭ tsan'ultĭ nige'sû"na. Ha-diskwûlti'yû tĭ'nanugagĭ', ase'gwû nige'sû"na tsagista''tĭ adû"ni'ga. Ulsg'eta hû"hihyû'"stani'ga. Ha-usdig'iyu-gwû ha-e'lawastû'" iyû'"ta dûhilâ'hĭstani'ga.

Sgĕ! Ha-Uhû"tsâ'yĭ tsûl'dâ'histĭ Gi''lĭ Sa'ka'nĭ, hanâ'gwa hatû'"gani'ga usĭnuli'yu. Hida'wĕhi-gâgû', gahu'stĭ tsanu'ltĭ nige'sû"na. Diskwûlti'yû ti'nanugai', ase'gwû nige'sû"na tsagista''tĭ adû"ni'ga. Ulsge'ta hû"hihyû"stani'ga. Ha-usdigi'yu-gwû ha-e'lawastû'" iyû'ta dûhitâ'hĭstani'ga.

Sgĕ! (Ha)-Usûhi'(-yĭ) tsûl'dâ'histĭ, Gi'l'ĭ Gû"nage'ĭ, hanâ'gwa hatû'"gani'ga usĭnuli'yû. Hida'wĕhi-gâgû', gahu'sti tsanu'ltĭ nige'sû'"na. Diskwûlti'yû tinanugagĭ', ase'gwû nige'sû"na tsagista''tĭ adû"ni'ga. Ulsg'eta hû"hihyû"stani'ga. Ha-usdigi'yu-gwû ha-e'lawastû'" iyû'"ta dûhitâ'hĭstani'ga.

Sgĕ! Wa'hală' tsûl'dâ'histĭ, Gi''lĭ Tsûne'ga, hanâ'gwa hatû'"gani'ga usĭnuli'yu. Hida'wĕhi-gâgû', gahu'stĭ tsanu'ltĭ nige'sû"na. Diskwûlti'yû ti'nanugagĭ', ase'gwû nige'sû"na tsagista''tĭ adû"ni'ga. Ha-ulsge'ta hû"hihyû'"stani'ga. Ha-usdigi'yu-gwû e'lawastû'" iyû'"ta dûhitâ'hĭstani'ga.

Sgĕ! Wa'hală tsûl'dâ'histĭ Tû'ksĭ Tsûne'ga, hanâ'gwa hatû'"gani'ga usĭnuli'yu. Hida'wĕhi-gâgû', gahu'stĭ tsanu'ltĭ nige'sû"na. Ha-kâ'lû *gayûske'ta* tsatû"neli'ga. Utsĭna'wa nu'tatănû'"ta.

(Degâsisisgû'"ĭ.)—Tûksĭ uhya'ska gûnsta'tĭ' na'skĭ igahi'ta gûnstâ'ĭ hĭ'skĭ iyuntale'gĭ tsûntûngi'ya. Û"skwû'ta kĭlû' atsâ'tastĭ sâ'gwa iyûtsâ'tastĭ, nû''kĭ igû'"kta'tĭ, naski-gwû' diû"lĕ'nĭskâhĭ' igû"yi'yĭ tsale'nihû. Nû''kine û"skwû'ta kĭlû' nû''kĭ iyatsâ'tastĭ. Uhyaskâ'hi-'nû ade'la degû'la'ĭ tă'lĭ unine'ga-gwû' nû'"wâti-'nû' higûnehâ'ĭ uhyaskâ'hĭ usdi'a-gwû. Une'lagi-'nû sâĭ' agadâ'ĭ agadi'dĭ û'"ti-gwû' yĭkĭ' âsi'yu-gwû na'ski-'nû aganû"li'eskâ'ĭ da'gûnstanehû'"ĭ ŭ'taâ'ta. Hiă'-nŭ' nû'"wâtĭ: Yâ'na-Unatsĕsdâ'gĭ tsana'sehâ'ĭ sâ'i-'nû Kâ'ga-Asgû'"tagĕ tsana'sehâ'ĭ, sâi-'nû' *Egû'"li*-gwû, sâi-nû' (U)wa'sgilĭ tsĭgĭ' Egû'"lĭ Usdi'a tsĭgĭ', nû"yâ'hi-'nû tsuyĕ'dâ'ĭ Yâ'na-Utsĕsdâgĭ naskiyû' tsĭgĭ', usdi'-gwû tsĭgĭ'. Egû'"lĭ (u)wa'sgilĭ tsĭgĭ'; sâ'ĭ Wâ'-tige Unas(te')tsa tsĭgĭ', sâ'i-'nû Û'"age Tsunaste'tsa, Niga'ta unaste'tsa gesâ'ĭ.

Sunale'-gwû ale'ndĭ adanû'"wâtĭ; tă'line e'ladĭ tsitkala'ĭ; tsâ'ine u'lsaladĭ''satû'; nû''kine igû' ts'kalâ'ĭ. Yeli'gwû' igesâ'ĭ. Nû'lstâiyanû'na gesâ'ĭ akanû"wi'skĭ, nasgwû' nulstaiyanû'na.

Translation.

FORMULA FOR TREATING THE CRIPPLER (RHEUMATISM).

Listen! Ha! In the Sun Land you repose, O Red Dog, O now you have swiftly drawn near to hearken. O great ada'wĕhĭ[1], you never fail in anything. O, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! Ha! In the Frigid Land you repose, O Blue Dog. O now you have swiftly drawn near to hearken. O great ad'áw hĭ, you never fail in anything. O. appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! Ha! In the darkening land you repose, O Black Dog. O, now you have swiftly drawn near to hearken. O great ada'wehi, you never fail in anything. O, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! On Wa'hală you repose. O White Dog. Oh, now you have swiftly drawn near to hearken. O great ada'wĕhi, you never fail in anything. Oh, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! On Wa'hală, you repose, O White Terrapin. O, now you have swiftly drawn near to hearken. O great ada'wĕhĭ, you never fail in anything. Ha! It is for you to loosen its hold on the bone. Relief is accomplished.

(Prescription.)—Lay a terrapin shell upon (the spot) and keep it there while the five kinds (of spirits) listen. On finishing, then blow once. Repeat four times, beginning each time from the start. On finishing the fourth time, then blow four times. Have two white beads lying in the shell, together with a little of the medicine. Don't interfere with it, but have a good deal boiling in another vessel—a bowl will do very well—and rub it on warm while treating by applying the hands. And this is the medicine: What is called Yâ'na-Utsĕ'sta ("bear's bed," the Aspidium acrostichoides or Christmas fern); and the other is called Kâ'ga-Asgû'ⁿtagĭ ("crow's shin," the Adianthum pedatum or Maidenhair fern); and the other is the common Egû'ⁿlĭ (another fern); and the other is the Little Soft (-leaved) Egû'ⁿlĭ (Osmunda Cinnamonea or cinnamon fern), which grows in the rocks and resembles Yâna-Utsĕ'sta and is a small and soft (-leaved) Egû'ⁿlĭ. Another has brown roots and another has black roots. The roots of all should be (used).

Begin doctoring early in the morning; let the second (application) be while the sun is still near the horizon; the third when it has risen to a considerable height (10 a. m.); the fourth when it is above at noon. This is sufficient. (The doctor) must not eat, and the patient also must be fasting.

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[1] *Ada'wĕhĭ* is a word used to designate one supposed to have supernatural powers, and is applied alike to human beings and to the spirits invoked in the formulas. Some of the mythic heroes famous for their magic deeds are spoken of as *ada'wĕhĭ* (plural *anida'wĕhĭ* or *anida'we*), but in its application to mortals the term is used only of the very greatest shamans. None of those now belonging to the band are considered worthy of being thus called, although the term was sometimes applied to one, Usawĭ, who died some years ago. In speaking of himself as an ada'wĕhĭ, as occurs in some of the formulas, the shaman arrogates to himself the same powers that belong to the gods. Our nearest equivalent is the word magician, but this falls far short of the idea conveyed by the Cherokee word. In the bible translation the word is used as the equivalent of angel or spirit.

Explanation.

As this formula is taken from the manuscript of Gahuni, who died nearly thirty years ago, no definite statement of the theory of the disease, or its treatment, can be given, beyond what is contained in the formula itself, which, fortunately, is particularly explicit; most doctors contenting themselves with giving only the words of the prayer, without noting the ceremonies or even the medicine used. There are various theories as to the cause of each disease, the most common idea in regard to rheumatism being that it is caused by the spirits of the slain animals, generally the deer, thirsting for vengeance on the hunter, as has been already explained in the myth of the origin of disease and medicine.

The measuring-worm (Catharis) is also held to cause rheumatism, from the resemblance of its motions to those of a rheumatic patient, and the name of the worm *wahĭlĭ'* is frequently applied also to the disease.

There are formulas to propitiate the slain animals, but these are a part of the hunting code and can only be noticed here, although it may be mentioned in passing that the hunter, when about to return to the settlement, builds a fire in the path behind him, in order that the deer chief may not be able to follow him to his home.

The disease, figuratively called the intruder (ulsgéta), is regarded as a living being, and the verbs used in speaking of it show that it is considered to be long, like a snake or fish. It is brought by the deer chief and put into the body, generally the limbs, of the hunter, who at once begins to suffer intense pain. It can be driven out only by some more powerful animal spirit which is the natural enemy of the deer, usually the dog or the wolf. These animal gods live up above beyond the seventh heaven and are the great prototypes of which the earthly animals are only diminutive copies. They are commonly located at the four cardinal points, each of which has a peculiar formulistic name and a special color which applies to everything in the same connection. Thus the east, north, west, and south are respectively the Sun Land, the Frigid Land, the Darkening Land, and Wā'hală', while their respective mythologic colors are Red, Blue, Black, and White. Wáhală is said to be a mountain far to the south. The white or red spirits are generally invoked for peace, health, and other blessings, the red alone for the success of an undertaking, the blue spirits to defeat the schemes of an enemy or bring down troubles upon him, and the black to compass his death. The white and red spirits are regarded as the most powerful, and one of these two is generally called upon to accomplish the final result.

In this case the doctor first invokes the Red Dog in the Sun Land, calling him a great adáwehi, to whom nothing is impossible and who never fails to accomplish his purpose. He is addressed as if

out of sight in the distance and is implored to appear running swiftly to the help of the sick man. Then the supplication changes to an assertion and the doctor declares that the Red Dog has already arrived to take the disease and has borne away a small portion of it to the uttermost ends of the earth. In the second, third, and fourth paragraphs the Blue Dog of the Frigid Land, the Black Dog of the Darkening Land, and the White Dog of Wáhală are successively invoked in the same terms and each bears away a portion of the disease and disposes of it in the same way. Finally, in the fifth paragraph, the White Terrapin of Wáhălă is invoked. He bears off the remainder of the disease and the doctor declares that relief is accomplished. The connection of the terrapin in this formula is not evident, beyond the fact that he is regarded as having great influence in disease, and in this case the beads and a portion of the medicine are kept in a terrapin shell placed upon the diseased part while the prayer is being recited.

The formulas generally consist of four paragraphs, corresponding to four steps in the medical ceremony. In this case there are five, the last being addressed to the terrapin instead of to a dog. The prayers are recited in an undertone hardly audible at the distance of a few feet, with the exception of the frequent *ha*, which seems to be used as an interjection to attract attention and is always uttered in a louder tone. The beads—which are here white, symbolic of relief —are of common use in connection with these formulas, and are held between the thumb and finger, placed upon a cloth on the ground, or, as in this case, put into a terrapin shell along with a small portion of the medicine. According to directions, the shell has no other part in the ceremony.

The blowing is also a regular part of the treatment, the doctor either holding the medicine in his mouth and blowing it upon the patient, or, as it seems to be the case here, applying the medicine by rubbing, and blowing his breath upon the spot afterwards. In some formulas the simple blowing of the breath constitutes the whole application. In this instance the doctor probably rubs the medicine upon the affected part while reciting the first paragraph in a whisper, after which he blows once upon the spot. The other paragraphs are recited in the same manner, blowing once after each. In this way the whole formula is repeated four times, with four blows at the end of the final repetition. The directions imply that the doctor blows only at the end of the whole formula, but this is not in accord with the regular mode of procedure and seems to be a mistake.

The medicine consists of a warm decoction of the roots of four varieties of fern, rubbed on with the hand. The awkward description of the species shows how limited is the Indian's power of botanic classification. The application is repeated four times during the same morning, beginning just at daybreak and ending at noon. Four is the sacred

number running through every detail of these formulas, there being commonly four spirits invoked in four paragraphs, four blowings with four final blows, four herbs in the decoction, four applications, and frequently four days' gaktu^{n}'ta or tabu. In this case no tabu is specified beyond the fact that both doctor and patient must be fasting. The tabu generally extends to salt or lye, hot food and women, while in rheumatism some doctors forbid the patient to eat the foot or leg of any animal, the reason given being that the limbs are generally the seat of the disease. For a similar reason the patient is also forbidden to eat or even to touch a squirrel, a buffalo, a cat, or any animal which "humps" itself. In the same way a scrofulous patient must not eat turkey, as that bird seems to have a scrofulous eruption on its head, while ball players must abstain from eating frogs, because the bones of that animal are brittle and easily broken.

HIĂ'-NÛ' NASGWÛ' DIDÛ'LĔ'SKĬ ADĂNÛ'WÂTĬ.

Asga'ya yûkanû'^{n}wĭ
Agĕ''ya Giagage'ĭ atătĭ';
agĕ''ya-nû yûkanû'^{n}wĭ
Asga'ya Gigage'ĭ atătĭ'.

Yû! Higĕ''ya Gigage'ĭ tsûdante'lûhĭ gese'ĭ. Ulsge'ta hi'tsanu'y'tani'leĭ'. Ha-Nû^{n}dâgû'^{n}yĭ nû^{n}ta'tsûdălenû'hĭ gese'ĭ. Gasgilâ' gigage'ĭ tsusdi'ga tetsadĭ'ilĕ' detsala'siditĕ-gĕ'ĭ. Hanâ'gwa usĭnuli'yu detsaldisi'yûĭ.

Utsĭ(nă')wa nu'tatanû'^{n}ta. Usû'hita nutanû'na. Utsĭnă'wa-gwû nigû^{n}tisge'stĭ.

(Degâ'sisisgû'^{n}ĭ)—Hiă-gwû' nigaû' kanâhe'ta. Nû''kiha nagû'nkw'tisgâ' dagû'^{n}stiskû'ĭ. Sâ'gwa nû^{n}skwû'ta gûnstû'^{n}ĭ agûnstagi'skâĭ hû^{n}tsatasgâ'ĭ nû''kine-'nû û^{n}skwû'ta nû''kĭ nû^{n}tsâtasgâ'ĭ. Hiă-'nû' nû'^{n}wâtĭ: Egû'^{n}lĭ, Yâ'na-'nû Utsĕsdâ'gĭ, (U)wa'sgilĭ tsĭgĭ' Egû'^{n}lĭ, tă'lĭ tsinu'dalĕ'ha, Kâ'ga-'nû Asgû'^{n}tagĕ tsiû^{n}nâ'sehâ'ĭ, Da'yĭ-'nû Uwâ'yĭ tsiû^{n}nâ'sehâ'ĭ. Su'talĭ iyutale'gĭ unaste'tsa agâ'tĭ, uga'nawû-'nû' dagûnsta''tisgâ'ĭ nû'^{n}wâtĭ asû^{n}ga'la'ĭ. Usû'hĭ adanû'^{n}wâtĭ. nu''kĭ tsusû'hita dulsi'nisû'^{n} adanû'^{n}wâtĭ. Ă'nawa'gi-'nû dilasula'gĭ gesû'^{n}ĭ ûlĕ' tsĭkani'kaga'ĭ gûw'sdi'-gwû utsawa'ta ă'nawa'-gwû-nû'.

Hiă-nû' gaktû'^{n}ta gûlkwâ'gĭ tsusû'hita. Gû'^{n}wădana'datlahistĭ' nige'sû^{n}na—Salâ'lĭ, gi''li-'nû, wĕ'sa-'nû, ă'tatsû-nû', a'mă-'nû', anigĕ''ya-nû. Uda'lĭ' ya'kanû^{n}wi'ya nû''kiha tsusû'hita unădană'lâtsi'tastĭ nige'sû^{n}na. Gasgilâ'gi-'nû uwă'su^{n}-gwû' u'skĭladi'stĭ uwă'sû nû''kĭ tsusû'hită'. Disâ'i-'nû dega'sgilâ û'^{n}tsa nû'nă' uwa''tĭ yigesûĭ nû''kĭ tsusû'hita.

Translation.

AND THIS ALSO IS FOR TREATING THE CRIPPLER.

Yû! O Red Woman, you have caused it. You have put the intruder under him. Ha! now you have come from the Sun Land. You have brought the small red seats, with your feet resting upon them. Ha! now they have swiftly moved away from you. Relief is accomplished. Let it not be for one night alone. Let the relief come at once.

(Prescription)—(*corner note at top.*) If treating a man one must say *Red Woman*, and if treating a woman one must say *Red Man.*

This is just all of the prayer. Repeat it four times while laying on the hands. After saying it over once, with the hands on (the body of the patient), take off the hands and blow once, and at the fourth repetition blow four times. And this is the medicine. Egû'ⁿlĭ (a species of fern). Yâ'-na-Utsĕ'sta ("bear's bed," the Aspidium acrostichoides or Christmas fern), *two* varieties of the soft-(leaved) Egû'ⁿlĭ (one, the small variety, is the Cinnamon fern, Osmunda cinnamonea), and what is called Kâ'ga Asgû'ⁿtagĕ ("crow's shin," the Adiantum pedatum or Maidenhair fern) and what is called Da'yĭ-Uwâ'yĭ ("beaver's paw"—not identified). Boil the roots of the six varieties together and apply the hands warm with the medicine upon them. Doctor in the evening. Doctor four consecutive nights. (The pay) is cloth and moccasins; or, if one does not have them, just a little dressed deerskin and some cloth.

And this is the tabu for seven nights. One must not touch a squirrel, a dog, a cat, the mountain trout, or women. If one is treating a married man they (*sic*) must not touch his wife for four nights. And he must sit on a seat by himself for four nights, and must not sit on the other seats for four nights.

Explanation.

The treatment and medicine in this formula are nearly the same as in that just given, which is also for rheumatism, both being written by Gahuni. The prayer differs in several respects from any other obtained, but as the doctor has been dead for years it is impossible to give a full explanation of all the points. This is probably the only formula in the collection in which the spirit invoked is the "Red Woman," but, as explained in the corner note at the top, this is only the form used instead of "Red Man," when the patient is a man. The Red Man, who is considered perhaps the most powerful god in the Cherokee pantheon, is in some way connected with the thunder, and is invoked in a large number of formulas. The change in the formula, according to the sex of the patient, brings to mind a belief in Irish folk medicine, that in applying certain remedies the doctor and patient must be of opposite sexes. The Red Man lives in the east, in accordance with the regular mythologic color theory, as already explained. The seats also are red, and the form of the verb indicates that the Red Woman is either standing upon them (plural) or sitting with her feet resting upon the rounds. These seats or chairs are frequently mentioned in the formulas, and always correspond in color with the spirit invoked. It is not clear why the Red Woman is held responsible for the disease, which is generally attributed to the revengeful efforts of the game, as already explained. In agreement with the regular form, the disease is said to be put under (not into) the patient. The assertion that the chairs "have swiftly moved away" would seem from analogy to mean that the disease has been placed upon the seats and thus borne away. The verb implies that the seats move by their own volition. Im-

mediately afterward it is declared that relief is accomplished. The expression "usû'hita nutanû'na" occurs frequently in these formulas, and may mean either "let it not be for one night alone," or "let it not stay a single night," according to the context.

The directions specify not only the medicine and the treatment, but also the doctor's fee. From the form of the verb the tabu, except as regards the seat to be used by the sick person, seems to apply to both doctor and patient. It is not evident why the mountain trout is prohibited, but the dog, squirrel, and cat are tabued, as already explained, from the fact that these animals frequently assume positions resembling the cramped attitude common to persons afflicted by rheumatism. The cat is considered especially uncanny, as coming from the whites. Seven, as well as four, is a sacred number with the tribe, being also the number of their gentes. It will be noted that time is counted by nights instead of by days.

HIÂ' I'NATÛ YUNISKÛ'LTSA ADANÛ'NWÂTÍ.

1. *Dûnu'wa*, dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa (*song*).
Sgĕ! Ha-Walâ'sĭ-gwû tsû^{n}lû'^{n}tani'ga.
2. *Dayuha*, dayuha, dayuha, dayuha dayuha (*song*).
Sgĕ! Ha-*Usugĭ*-gwû tsû^{n}-lû^{n}'-tani'ga.

(Degâ'sisisgû'^{n}ĭ).—Kanâgi'ta nâyâ'ga hiă' dilentisg'û^{n}ĭ. Tă'lĭ igû'nkw'ta'tĭ, ûlĕ' talinĕ' tsutanû'^{n}na nasgwû' tâ'lĭ igû'nkw'ta'tĭ'. Tsâ'la aganû'^{n}lieskâĭ' tsâ'la yikani'gû^{n}gû'âĭ' watsi'la-gwû ganû^{n}li'yĕtĭ uniskûl'tsû'^{n}ĭ. Nû''kĭ nagade'stisgâĭ' aganû^{n}li'esgû^{n}ĭ. Akskû'nĭ gadest'a'tĭ, nûû'kĭ nagade' sta hû^{n}tsatasgâ'ĭ. Hiă-'nû' i'natû akti'sĭ udestâ'ĭ yigû'n'ka, naski-'nû' tsagadû'lăgisgâ'ĭ iyu'stĭ gatgû'^{n}ĭ.

Translation.

THIS IS TO TREAT THEM IF THEY ARE BITTEN BY A SNAKE.

1. Dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa.
Listen! Ha! It is only a common frog which has passed by and put it (the intruder) into you.
2. Dayuha', dayuha, dayuha, dayuha, dayuha.
Listen! Ha! It is only an *Usu'gĭ* which has passed by and put it into you.

(Prescription.)—Now this at the beginning is a song. One should say it twice and also say the second line twice. Rub tobacco (juice) on the bite for some time, or if there be no tobacco just rub on saliva once. In rubbing it on, one must go around four times. Go around toward the left and blow four times in a circle. This is because in lying down the snake always coils to the right and this is just the same (*lit.* "means like") as uncoiling it.

Explanation.

This is also from the manuscript book of Gahuni, deceased, so that no explanation could be obtained from the writer. The formula consists of a song of two verses, each followed by a short recitation.

The whole is repeated, according to the directions, so as to make four verses or songs; four, as already stated, being the sacred number running through most of these formulas. Four blowings and four circuits in the rubbing are also specified. The words used in the songs are sometimes composed of unmeaning syllables, but in this case dûnuwa and dayuha seem to have a meaning, although neither the interpreter nor the shaman consulted could explain them, which may be because the words have become altered in the song, as frequently happens. Dûnu'wa appears to be an old verb, meaning "it has penetrated," probably referring to the tooth of the reptile. These medicine songs are always sung in a low plaintive tone, somewhat resembling a lullaby. Usu''gĭ also is without explanation, but is probably the name of some small reptile or batrachian.

As in this case the cause of the trouble is evident, the Indians have no theory to account for it. It may be remarked, however, that when one dreams of being bitten, the same treatment and ceremonies must be used as for the actual bite; otherwise, although perhaps years afterward, a similar inflammation will appear on the spot indicated in the dream, and will be followed by the same fatal consequences. The rattlesnake is regarded as a supernatural being or ada'wehi, whose favor must be propitiated, and great pains are taken not to offend him. In consonance with this idea it is never said among the people that a person has been bitten by a snake, but that he has been "scratched by a brier." In the same way, when an eagle has been shot for a ceremonial dance, it is announced that "a snowbird has been killed," the purpose being to deceive the rattlesnake or eagle spirits which might be listening.

The assertion that it is "only a common frog" or "only an Usu''gĭ brings out another characteristic idea of these formulas. Whenever the ailment is of a serious character, or, according to the Indian theory, whenever it is due to the influence of some powerful disease spirit the doctor always endeavors to throw contempt upon the intruder, and convince it of his own superior power by asserting the sickness to be the work of some inferior being, just as a white physician might encourage a patient far gone with consumption by telling him that the illness was only a slight cold. Sometimes there is a regular scale of depreciation, the doctor first ascribing the disease to a rabbit or groundhog or some other weak animal, then in succeeding paragraphs mentioning other still less important animals and finally declaring it to be the work of a mouse, a small fish, or some other insignificant creature. In this instance an ailment caused by the rattlesnake, the most dreaded of the animal spirits, is ascribed to a frog, one of the least importance.

In applying the remedy the song is probably sung while rubbing the tobacco juice around the wound. Then the short recitation is repeated and the doctor blows four times in a circle about the spot.

The whole ceremony is repeated four times. The curious directions for uncoiling the snake have parallels in European folk medicine.

GÛ·WĂNI'GISTÂ'Ĭ ADANU'·WÂTĬ.

Sgĕ! Ha-tsida'wĕiyu, gahus'tĬ aginúl'tĬ nige'sû^{n}na. Gû^{n}gwădag'a^{n}ad'diyû' tsida'wĕi'yu. Ha-Wăhuhu'-gwû hitagu'sgastanĕ'hĕĬ. Ha-nâ'gwa hŭ'kikahû^{n}nû' ha-dusŭ''gahĬ digesû'^{n}Ĭ, iyû'^{n}ta wû^{n}'kidâ'-hĬstani'ga.

Sgĕ! Ha-tsida'wĕi'yu, gahu'stĬ aginu'l'tĬ nige'sû^{n}na. Gû^{n}gwădaga'nad'diyû' tsida'wĕi'yu. Ha-Uguku'-gwû hitagu'sgastanĕ'heĬ' udâhi'yu tag'u'sgastanĕ'hĕĬ'. Ha-na'gwadi'na hû^{n}kikahû^{n}nû'. Hanânâ'hĬ digesŭ'^{n}Ĭ, iyû'^{n}ta wû^{n}'kidâ'hĬstani'ga.

Sgĕ! Ha-tsida'wĕi'yu, gahu'stĬ aginu'l'tĬ nige'sû^{n}na. Gû^{n}gwădaga'nad'diyû tsida'wĕi'yu. Ha-Tsistu-gwû hitagu'sgastanĕ'hĕ'Ĭ udâhi'yu tagu'sgastanĕ'hĕĬ'. Ha-nâ'gwadi'na hû'^{n}kikahû'^{n}nû. Ha-sunû^{n}da'sĬ iyû'^{n}ta kane'skawâ'dihĬ digesû'^{n}Ĭ, wû^{n}'kidâ'hĬstani'ga.

Sgĕ! Ha-tsida'wĕi'yu, gahu'stĬ aginu'l'tĬ nige'sû^{n}na. Gû^{n}gwădaga'nad'di'yû tsida'wĕi'yu. Ha-De'tsata'-gwû (hi)tagu'sgastanĕ'hĕĬ udâhi'yu tagu'sgastanĕ'hĕĬ'. Ha-nâ'gwadi'na hû^{n}kikahû'^{n}na. Haudâ'tale'ta digesû'^{n}Ĭ, iyû'^{n}ta wû^{n}'kidâ'hĬstani'ga.

(Degâ'sisisgû'^{n}Ĭ)—Hiă'-skĬnĬ' unsdi'ya dĬkanû'^{n}wâtĬ tsa'natsa'yihâ'Ĭ tsaniska'iha'Ĭ; gû^{n}wani'gista'Ĭ hi'anûdĬ'sgaĬ'. Ămă' dûtsati'stĬsgâ'Ĭ nû''kĬ tsusû'hita dĬkanû'^{n}wâtĬ Ulsinide'na dakanû'^{n}wisgâ'Ĭ. Ŭ'^{n}tsa iyû'^{n}ta witunini'dastĬ yigesâ'Ĭ.

Translation.

TO TREAT THEM WHEN SOMETHING IS CAUSING SOMETHING TO EAT THEM.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is a mere screech owl that has frightened him. Ha! now I have put it away in the laurel thickets. There I compel it to remain.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is a mere hooting owl that has frightened him. Undoubtedly that has frightened him. Ha! At once I have put it away in the spruce thickets. Ha! There I compel it to remain.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is only a rabbit that has frightened him. Undoubtedly that has frightened him. Ha! Instantly I have put it away on the mountain ridge. Ha! There in the broom sage I compel it to remain.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is only a mountain sprite that has frightened him. Undoubtedly that has frightened him. Ha Instantly I have put it away on the bluff. Ha! There I compel it to remain.

(Prescription)—Now this is to treat infants if they are affected by crying and nervous fright. (Then) it is said that something is causing something to eat them. To treat them one may blow water on them for four nights. Doctor them just before dark. Be sure not to carry them about outside the house.

Explanation.

The Cherokee name for this disease is Gu^{n}wani'gistâĭ', which signifies that "something is causing something to eat," or gnaw the vitals of the patient. The disease attacks only infants of tender age and the symptoms are nervousness and troubled sleep, from which the child wakes suddenly crying as if frightened. The civilized doctor would regard these as symptoms of the presence of worms, but although the Cherokee name might seem to indicate the same belief, the real theory is very different.

Cherokee mothers sometimes hush crying children by telling them that the screech owl is listening out in the woods or that the De'tsata —a malicious little dwarf who lives in caves in the river bluffs— will come and get them. This quiets the child for the time and is so far successful, but the animals, or the De'tsata, take offense at being spoken of in this way, and visit their displeasure upon the *children born to the mother afterward.* This they do by sending an animal into the body of the child to gnaw its vitals. The disease is very common and there are several specialists who devote their attention to it, using various formulas and prescriptions. It is also called ătawi'nĕhĭ, signifying that it is caused by the "dwellers in the forest," i. e., the wild game and birds, and some doctors declare that it is caused by the revengeful comrades of the animals, especially birds, killed by the father of the child, the animals tracking the slayer to his home by the blood drops on the leaves. The next formula will throw more light upon this theory.

In this formula the doctor, who is certainly not overburdened with modesty, starts out by asserting that he is a great ada'wehi, who never fails and who surpasses all others. He then declares that the disease is caused by a mere screech owl, which he at once banishes to the laurel thicket. In the succeeding paragraphs he reiterates his former boasting, but asserts in turn that the trouble is caused by a mere hooting owl, a rabbit, or even by the De'tsata, whose greatest exploit is hiding the arrows of the boys, for which the youthful hunters do not hesitate to rate him soundly. These various mischief-makers the doctor banishes to their proper haunts, the hooting owl to the spruce thicket, the rabbit to the broom sage on the mountain side, and the De'tsata to the bluffs along the river bank.

Some doctors use herb decoctions, which are blown upon the body of the child, but in this formula the only remedy prescribed is water, which must be blown upon the body of the little sufferer just before dark for four nights. The regular method is to blow once each at the end of the first, second, and third paragraphs and four times at the end of the fourth or last. In diseases of this kind, which are not supposed to be of a local character, the doctor blows

first upon the back of the head, then upon the left shoulder, next upon the right shoulder, and finally upon the breast, the patient being generally sitting, or propped up in bed, facing the east. The child must not be taken out of doors during the four days, because should a bird chance to fly overhead so that its shadow would fall upon the infant, it would *fan the disease back* into the body of the little one.

GÛ·WANI'GISTÛ·Ĭ DITANÛ·WÂTI'YĬ.

Yû! Sgĕ! Usĭnu'lĭ hatû'ⁿgani'ga, Giya'giya' Sa'ka'nĭ, ew'satâ'gĭ tsûl'dâ'histĭ. Usĭnu'lĭ hatlasi'ga. Tsis'kwa-gwû' ulsge'ta uwu'tlani'lĕĭ'. Usĭnuli'yu atsahilu'gĭsi'ga. Utsĭnă'wa nu'tatanû'ⁿta. Yŭ!

Yû! Sgĕ! Usĭnu'lĭ hatûⁿgani'ga, Diga'tiskĭ Wâtige'ĭ, galû'ⁿlatĭ iyû'ⁿta ditsûl'dâ'histĭ. Ha-nâ'gwa usĭnu'lĭ hatlasi'ga. Tsi'skwa-gwû dĭtu'nila'w'itsû'hĭ higese'ĭ. Usĭnûlĭ kĕ'tati'gû'lahi'ga. Utsĭnă'wa adûⁿni'ga. Yû!

Translation.

TO TREAT GÛⁿWANI'GISTÛ'ⁿĬ—(SECOND).

Yû! Listen! Quickly you have drawn near to hearken, O Blue Sparrow-Hawk; in the spreading tree tops you are at rest. Quickly you have come down. The intruder is only a bird which has overshadowed him. Swiftly you have swooped down upon it. Relief is accomplished. Yû!

Yû! Listen! Quickly you have drawn near to hearken, O Brown Rabbit-Hawk; you are at rest there above. Ha! Swiftly now you have come down. It is only the birds which have come together for a council. Quickly you have come and scattered them. Relief is accomplished. Yû!

Explanation.

This formula, also for Gûⁿwani'gistû'ⁿĭ or Atawinĕ'hĭ, was obtained from A'wan'ita (Young Deer), who wrote down only the prayer and explained the treatment orally. He coincides in the opinion that this disease in children is caused by the birds, but says that it originates from the shadow of a bird flying overhead having fallen upon the pregnant mother. He says further that the disease is easily recognized in children, but that it sometimes does not develop until the child has attained maturity, when it is more difficult to discern the cause of the trouble, although in the latter case dark circles around the eyes are unfailing symptoms.

The prayer—like several others from the same source—seems incomplete, and judging from analogy is evidently incorrect in some respects, but yet exemplifies the disease theory in a striking manner. The disease is declared to have been caused by the birds, it being asserted in the first paragraph that a bird has cast its shadow upon the sufferer, while in the second it is declared that they have gathered in council (in his body). This latter is a favorite expression in these formulas to indicate the great number of the disease animals.

Another expression of frequent occurrence is to the effect that the disease animals have formed a settlement or established a townhouse in the patient's body. The disease animal, being a bird or birds, must be dislodged by something which preys upon birds, and accordingly the Blue Sparrow-Hawk from the tree tops and the Brown Rabbit-Hawk (Diga'tiskĭ—"One who snatches up"), from above are invoked to drive out the intruders. The former is then said to have swooped down upon them as a hawk darts upon its prey, while the latter is declared to have scattered the birds which were holding a council. This being done, relief is accomplished. Yû! is a meaningless interjection frequently used to introduce or close paragraphs or songs.

The medicine used is a warm decoction of the bark of Kûnstû'tsĭ (Sassafras—Sassafras officinale), Kanû^{n}si'ta (Flowering Dogwood—Cornus florida), Udâ'lana (Service tree—Amelanchier Canadensis), and Uni'kwa (Black Gum—Nyssa multiflora), with the roots of two species (large and small) of Da'yakalĭ'skĭ (Wild Rose—Rosa lucida). The bark in every case is taken from the east side of the tree, and the roots selected are also generally, if not always, those growing toward the east. In this case the roots and barks are not bruised, but are simply steeped in warm water for four days. The child is then stripped and bathed all over with the decoction morning and night for four days, no formula being used during the bathing. It is then made to hold up its hands in front of its face with the palms turned out toward the doctor, who takes some of the medicine in his mouth and repeats the prayer mentally, blowing the medicine upon the head and hands of the patient at the final *Yû!* of each paragraph. It is probable that the prayer originally consisted of four paragraphs, or else that these two paragraphs were repeated. The child drinks a little of the medicine at the end of each treatment.

The use of salt is prohibited during the four days of the treatment, the word (amă') being understood to include lye, which enters largely into Cherokee food preparations. No chicken or other feathered animal is allowed to enter the house during the same period, for obvious reasons, and strangers are excluded for reasons already explained.

HIA' DU'NIYUKWATISGÛ'^{n}I KANA'HÈHÛ.

Sgĕ! Nû^{n}dâgû'^{n}yĭ tsûl'dâ'histĭ, Kanani'skĭ Gigage. Usĭnu'lĭ nû'^{n}nâ gi'gage hĭnû^{n}ni'ga. Hida'wĕhi-gâgû', astĭ' digi'gage usĭnû'lĭ dehĭkssa'û^{n}tani'ga. Ulsge'ta kane'ge kayu''ga gesû'^{n}, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa'saniy'teĭ'. Usĭnu'lĭ astĭ' digi'gage dehada'û^{n}tani'ga, adi'na tsûlstai-yû''ti-gwû higese'ĭ. Nâ'gwa gânagi'ta da'tsatane'lĭ. Utsĭnă'wa nu'tatanû'^{n}ta nû^{n}tûneli'ga. Yû!

Hĭgayû'^{n}lĭ Tsûne'ga hatû'^{n}gani'ga. "A'ya-gâgû' gatû'^{n}gisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Na'ski-gâgû' itsa'-

wesû'hĭ nâ'gwa usĭnu'lĭ hatû'ⁿgani'ga. Utsĭnă'wa nûtatanû'ta nûⁿtû'neli'ga. Yû!

Sgĕ! Uhyûⁿtlâ'yĭ tsûl'dâ'histi Kanani'skĭ Sa'ka'nĭ. Usĭnu'lĭ nû'ⁿnâ sa'ka'nĭ hĭnûⁿni'ga. Hida'wĕhi-gâgû', astĭ' (di)sa'ka'nĭ usĭnu'lĭ dehĭksa'ûⁿtani'ga. Ulsge'ta kane'ge kayu''ga gesû'ⁿ, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa'saniy'te(ĭ'). Usĭnu'lĭ astĭ' disa'ka'nige dehada'ûⁿtaniga, adi'na tsûlstai-yû''ti-gwû higese'ĭ. Nâ'gwa tsgâ'ya gûnagi'ta tsûtûneli'ga. Utsĭnă'wa nu'tatanû'ⁿta nûⁿtûneli'ga. Yû!

Hĭgayû'ⁿlĭ Tsûne'ga hatûⁿgani'ga. "A'ya-gâgû' gatû'ⁿgisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Nas'kigâgû' itsawesû'hĭ nâ'gwa usĭnu'lĭ hatû'ⁿgani'ga. Utsĭnă'wa nutatanû'ⁿta nûⁿtûneli'ga. Yû!

Sgĕ! Usûhi'yĭ tsûl'dâ'histĭ Kanani'skĭ Û'ⁿnage. Usĭnu'lĭ nû'ⁿnâ û'ⁿnage hĭnûⁿni'ga. Hida'wĕhi-gâgû', astĭ' digû'ⁿnage usĭnu'lĭ dehĭksa'ûⁿtani'ga. Ulsge'ta kane'ge kayu''ga gesû'ⁿ, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa'saniy'teĭ'. Usĭnu'lĭ astĭ' digû'ⁿnage dehada'ûⁿtani'ga, adi'na tsûlstai-yû''ti-gwû higese'ĭ. Nâ'gwa tsgâ'ya gûnagi'ta tsûtûneli'ga. Utsĭnă'wa nutatanû'ⁿta nûⁿtûneli'ga. Yû!

Hĭgayû'ⁿlĭ Tsûne'ga hatûⁿgani'ga. "A'ya-gâgû' gatû'ⁿgisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Na'skigâgû' itsawesû'hĭ nâ'gwa usĭnu'li hatû'ⁿgani'ga. Utsĭnă'wa nutatanû'ⁿta nûⁿtûneli'ga. Yû!

Sgĕ! Galû'ⁿlatĭ tsûl'dâ'histĭ, Kanani'skĭ Tsûne'ga. Usĭnu'lĭ nû'ⁿnâ une'ga hĭnûⁿni'ga. Hida'wĕhi-gâgû', astĭ' tsune'ga usĭnu'lĭ dehĭksa'ûⁿ tani'ga. Ulsge'ta kane'ge kayu''ga gesû'ⁿ, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa'sănĭy'teĭ'. Usĭnu'lĭ astĭ' tsune'ga dehada'ûⁿtani'ga, adi'na tsûlstai-yû''ti-gwû higese'ĭ. Nâ'gwa tsgâ'ya gûnagi'ta tsûtûneli'ga. Utsĭnă'wa nu'tatanû'ⁿta, nûⁿtûneli'ga. Yû!

Hĭgayû'ⁿlĭ Tsûne'ga hatû'ⁿgani'ga. "A'ya-gâgû' gatû'ⁿgisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Naski-gâgû' itsawesû'hĭ nâ'gwa usĭnu'lĭ hatûⁿgani'ga. U'tsĭnă'wa nutatanû'ⁿta nûⁿtûneli'ga. Yû!

(Degasi'sisgû'ⁿĭ)—Hiă' duniyukwa'tisgû'ⁿĭ dĭkanû'ⁿwâtĭ ătanû'ⁿsida'hĭ yĭ'gĭ. Na'skĭ digû'nstanĕ''ti-gwû ûlĕ' tsĭtsâtû' yie'lisû. Nigûⁿ'-gwû usû'na [*for* usûnda'na?] gû'ⁿtatĭ nayâ'ga nû'ⁿwatĭ unanû'ⁿskă'la'ĭ. Kane'ska dalâ'nige unaste'tla tsĭ'gĭ. Se'lu dĭgahû'nû'hĭ tsuni'yahĭstĭ' nû''kĭ tsusû'hita, kanâhe'na-'nû naskĭ' iga'ĭ udanû'stĭ hi'gĭ nayâ'ga.

Translation.

THIS TELLS ABOUT MOVING PAINS IN THE TEETH (NEURALGIA?).

Listen! In the Sunland you repose, O Red Spider. Quickly you have brought and laid down the red path. O great ada'wehi. quickly you have brought down the red threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the red threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

Listen! In the Frigid Land you repose, O Blue Spider. Quickly you have brought and laid down the blue path. O great ada'wehi, quickly you have brought down the blue threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the blue threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

Listen! In the Darkening Land you repose, O Black Spider. Quickly you have brought and laid down the black path. O great ada'wehi, quickly you have brought down the black threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the black threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

Listen! You repose on high, O White Spider. Quickly you have brought and laid down the white path. O great ada'wehi, quickly you have brought down the white threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the white threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

(Prescription)—This is to treat them if there are pains moving about in the teeth. It is only (necessary) to lay on the hands, or to blow, if one should prefer. One may use any kind of a tube, but usually they have the medicine in the mouth. It is the Yellow-rooted Grass (kane' ska dalâ'nige unaste'tla; not identified.) One must abstain four nights from cooked corn (hominy), and kanâhe'na (fermented corn gruel) is especially forbidden during the same period.

Explanation.

This formula is taken from the manuscript book of Gatigwanasti, now dead, and must therefore be explained from general analogy. The ailment is described as "pains moving about in the teeth"—that is, affecting several teeth simultaneously—and appears to be neuralgia. The disease spirit is called "the intruder" and "the tormentor" and is declared to be a mere worm (tsgâ'ya), which has wrapped itself around the base of the tooth. This is the regular toothache theory. The doctor then calls upon the Red Spider of the Sunland to let down the red threads from above, along the red path, and to take up the intruder, which is just what the spider

eats. The same prayer is addressed in turn to the Blue Spider in the north, the Black Spider in the west and the White Spider above (galû^{n}'lati). It may be stated here that all these spirits are supposed to dwell above, but when no point of the compass is assigned, galu^{n}'lati is understood to mean directly overhead, but far above everything of earth. The dweller in this overhead galû^{n}'lati may be red, white, or brown in color. In this formula it is white, the ordinary color assigned spirits dwelling in the south. In another toothache formula the Squirrel is implored to take the worm and put it between the forking limbs of a tree on the north side of the mountain.

Following each supplication to the spider is another addressed to the Ancient White, the formulistic name for fire. The name refers to its antiquity and light-giving properties and perhaps also to the fact that when dead it is covered with a coat of white ashes. In those formulas in which the hunter draws omens from the live coals it is frequently addressed as the Ancient Red.

The directions are not explicit and must be interpreted from analogy. "Laying on the hands" refers to pressing the thumb against the jaw over the aching tooth, the hand having been previously warmed over the fire, this being a common method of treating toothache. The other method suggested is to blow upon the spot (tooth or outside of jaw ?) a decoction of an herb described rather vaguely as "yellow-rooted grass" either through a tube or from the mouth of the operator. Igawĭ', a toothache specialist, treats this ailment either by pressure with the warm thumb, or by blowing tobacco smoke from a pipe placed directly against the tooth. Hominy and fermented corn gruel (kanâhe'na) are prohibited for the regular term of four nights, or, as we are accustomed to say, four days, and special emphasis is laid upon the gruel tabu.

The prayer to the Spider is probably repeated while the doctor is warming his hands over the fire, and the following paragraph to the Ancient White (the Fire) while holding the warm thumb upon the aching spot. This reverses the usual order, which is to address the fire while warming the hands. In this connection it must be noted that the fire used by the doctor is never the ordinary fire on the hearth, but comes from four burning chips taken from the hearth fire and generally placed in an earthen vessel by the side of the patient. In some cases the decoction is heated by putting into it seven live coals taken from the fire on the hearth.

UNAWA STĬ EGWA (ADANÛ^{n}WÂTĬ).

(2) (3) (4) (5) (6)
Sgĕ! Galû'^{n}latĭ' hinehi' hinehi'yû hinida'we, utsinâ'wa adû^{n}niga
12 12 22 34 33 566—Hayĭ'!

(1) (2) (3) (4) (5) (6)
Sgĕ! U^{n}wadâ'hi hinehi', hinehi'yû hinida'we utsinâ'wa adû^{n}ni'ga
12 12 22 34 33 566—Hayĭ'!

(1) (2) (3) (4) (5) (6)
Sgè! Nâtsihi' hinehi' hinehi'yû hinida'we utsinâ'wa adû^{n}ni'ga
12 12 22 34 33 566—Hayĭ'!

(1) (2) (3) (4) (5) (6)
Sgĕ! Amâyi' hinehi', hinehi'yû hinida'we utsinâ'wa adû^{n}ni'ga
12 12 22 33 33 566—Hayĭ'!

Sgĕ! Ha-nâ'gwa hatû^{n}gani'ga, Agalu'ga Tsûsdi'ga, hida'wĕhĭ, â'tali tsusdiga'hĭ duda'w'satû^{n} ditsûldâ'histĭ. (Hida'wĕhĭ, gahu'stĭ tsanu'lû^{n}hû^{n}sgĭ' nige'sû^{n}na.) Ha-nâ'gwa da'tûlehû^{n}gû'. Usdi'gi(yu) utiya'stanû^{n}'(hĭ) (higese'i). (Hû^{n})hiyala'gistani'ga igâ'tĭ usdigâ'hĭ usa'hĭlagĭ' Igâtu'ltĭ nû^{n}nâ'hĭ wĭte'tsatănû^{n}'û^{n}sĭ'. A'ne'tsâge'ta *getsatûnĕhĭ* nû^{n}gûlstani'ga igû^{n}'wûlstanita'sti-gwû. Ati'gale'yata tsûtû'neli'ga. Utsĭnâ'wa (1) nigû^{n}tisge'stĭ.

Sgĕ! Ha-nâ'gwa hû^{n}hatû^{n}gani'ga, Agalu'ga Hegwahigwû'. Â'talĭ tsegwâ'hĭ duda'w'satû^{n} iyû^{n}ta ditsûldâ'histĭ. Agalu'ga He'gwa, hausĭnu'lĭ da'tûlehû^{n}gû. Usdi'giyu utiya'stanû^{n}'hĭ. Hiyala'gistani'ga ulsge'ta igâ't-egwâ'hĭ) usa'hĭlagĭ'. (Igat-(egwâ'hĭ iyû^{n}'ta nû^{n}nâ'hĭ wĭtetsatanû^{n}'û^{n}sĭ'. A'ne'tsâge'ta *getsatûne'litise'sti* igû^{n}'wûlstanita'sti-gwû. Utsĭnâ'wa-gwû nutatanû^{n}ta. Nigagĭ' Yû!

(Degâsi'sisgû'^{n}ĭ)—Unawa'stĭ e'gwa u'nitlû^{n}gâ'ĭ. Ta'ya gû'^{n}tatĭ, ditsa'tista''ti. Tsâ'l-agayû'^{n}lĭ yă'hă ulû'^{n}kwati-gwû nasgwû'.

Translation.

TO TREAT THE GREAT CHILL.

Listen! On high you dwell, On high you dwell—you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayĭ!

Listen! On Û^{n}wadâ'hĭ you dwell, On Û^{n}wadâ'hĭ you dwell—you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayĭ!

Listen! In the pines you dwell, In the pines you dwell—you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayĭ!

Listen! In the water you dwell, In the water you dwell, you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayĭ!

Listen! O now you have drawn near to hearken, O Little Whirlwind, O ada'wehi, in the leafy shelter of the lower mountain, there you repose. O ada'wehi, you can never fail in anything. Ha! Now rise up. A very small portion [of the disease] remains. You have come to sweep it away into the small swamp on the upland. You have laid down your paths near the swamp. It is ordained that you shall scatter it as in play, so that it shall utterly disappear. By you it must be scattered. So shall there be relief.

Listen! O now again you have drawn near to hearken, O Whirlwind, surpassingly great. In the leafy shelter of the great mountain there you repose. O Great Whirlwind, arise quickly. A very small part [of the disease] remains. You have come to sweep the intruder into the great swamp on the upland. You have laid down your paths toward the great swamp. You shall scatter it as in play so that it shall utterly disappear. And now relief has come. All is done. Yû!

[1] So written and pronounced by A'yû^{n}'ini instead of utsĭnă'wa.

(Prescription.)—(This is to use) when they are sick with the great chill. Take a decoction of wild cherry to blow upon them. If you have Tsâ'l-agayû'ⁿlĭ ("old tobacco"—*Nicotiana rustica*) it also is very effective.

Explanation.

Unawa'stĭ, "that which chills one," is a generic name for intermittent fever, otherwise known as fever and ague. It is much dreaded by the Indian doctors, who recognize several varieties of the disease, and have various theories to account for them. The above formula was obtained from A'yû'ⁿni (Swimmer), who described the symptoms of this variety, the "Great Chill," as blackness in the face, with alternate high fever and shaking chills. The disease generally appeared in spring or summer, and might return year after year. In the first stages the chill usually came on early in the morning, but came on later in the day as the disease progressed. There might be more than one chill during the day. There was no rule as to appetite, but the fever always produced an excessive thirst. In one instance the patient fainted from the heat and would even lie down in a stream to cool himself. The doctor believed the disease was caused by malicious tsgâ'ya, a general name for all small insects and worms, excepting intestinal worms. These tsgâ'ya—that is, the disease tsgâ'ya, not the real insects and worms—are held responsible for a large number of diseases, and in fact the tsgâ'ya doctrine is to the Cherokee practitioner what the microbe theory is to some modern scientists. The tsgâ'ya live in the earth, in the water, in the air, in the foliage of trees, in decaying wood, or wherever else insects lodge, and as they are constantly being crushed, burned or otherwise destroyed through the unthinking carelessness of the human race, they are continually actuated by a spirit of revenge. To accomplish their vengeance, according to the doctors, they "establish towns" under the skin of their victims, thus producing an irritation which results in fevers, boils, scrofula and other diseases.

The formula begins with a song of four verses, in which the doctor invokes in succession the spirits of the air, of the mountain, of the forest, and of the water. Galû'ⁿlatĭ, the word used in the first verse, signifies, as has been already explained, "on high" or "above everything," and has been used by translators to mean heaven. Û'ⁿwadâ'hĭ in the second verse is the name of a bald mountain east of Webster, North Carolina, and is used figuratively to denote any mountains of bold outline. The Cherokees have a tradition to account for the name, which is derived from Û'ⁿwadâ'lĭ, "provision house." Nâ'tsihĭ' in the third verse signifies "pinery," from nâ'tsĭ, "pine," but is figuratively used to denote a forest of any kind.

In the recitation which follows the song, but is used only in serious cases, the doctor prays to the whirlwind, which is considered to dwell among the trees on the mountain side, where the trembling of

the leaves always gives the first intimation of its presence. He declares that a small portion of the disease still remains, the spirits invoked in the song having already taken the rest, and calls upon the whirlwind to lay down a path for it and sweep it away into the swamp on the upland, referring to grassy marshes common in the small coves of the higher mountains, which, being remote from the settlements, are convenient places to which to banish the disease. Not satisfied with this, he goes on to direct the whirlwind to scatter the disease as it scatters the leaves of the forest, so that it shall utterly disappear. In the Cherokee formula the verb a'ne'tsâge'ta means literally "to play," and is generally understood to refer to the ball play, a'ne'tsâ, so that to a Cherokee the expression conveys the idea of catching up the disease and driving it onward as a player seizes the ball and sends it spinning through the air from between his ball sticks. Niga'gĭ is a solemn expression about equivalent to the Latin consummatum est.

The doctor beats up some bark from the trunk of the wild cherry and puts it into water together with seven coals of fire, the latter being intended to warm the decoction The leaves of Tsâl-agayû'ⁿli (Indian tobacco—Nicotiana rustica) are sometimes used in place of the wild cherry bark. The patient is placed facing the sunrise, and the doctor, taking the medicine in his mouth, blows it over the body of the sick man. First, standing between the patient and the sunrise and holding the medicine cup in his hand, he sings the first verse in a low tone. Then, taking some of the liquid in his mouth, he advances and blows it successively upon the top of the head, the right shoulder, left shoulder, and breast or back of the patient, making four blowings in all. He repeats the same ceremony with the second, third, and fourth verse, returning each time to his original position. The ceremony takes place in the morning, and if necessary is repeated in the evening. It is sometimes necessary also to repeat the treatment for several—generally four—consecutive days.

The recitation is not used excepting in the most serious cases, when, according to the formula, "a very small portion" of the disease still lingers. It is accompanied by blowing *of the breath alone*, without medicine, probably in this case typical of the action of the whirlwind. After repeating the whole ceremony accompanying the song, as above described, the doctor returns to his position in front of the patient and recites in a whisper the first paragraph to the Little Whirlwind, after which he advances and blows his breath upon the patient four times as he has already blown the medicine upon him. Then going around to the north he recites the second paragraph to the Great Whirlwind, and at its conclusion blows in the same manner. Then moving around to the west—behind the patient—he again prays to the Little Whirlwind with the same ceremonies, and finally moving around to the south side he closes with the prayer to the

Great Whirlwind, blowing four times at its conclusion. The medicine must be prepared anew by the doctor at the house of the patient at each application morning or evening. Only as much as will be needed is made at a time, and the patient always drinks what remains after the blowing. Connected with the preparation and care of the medicine are a number of ceremonies which need not be detailed here. The wild cherry bark must always be procured fresh; but the Tsâl-agayû'ⁿlĭ ("Old Tobacco") leaves may be dry. When the latter plant is used four leaves are taken and steeped in warm water with the fire coals, as above described.

HIÄ' TSUNSDI'GA DIL'TADI'NATANTI'YĬ. I.

Sgĕ! Hĭsga'ya Ts'sdi'ga ha-nâ'gwa da'tûlehû^{n}gû' kĭlû-gwû'. Iyû'^{n}ta agayû'^{n}linaskĭ' taya'ĭ. Eska'niyŭ unayĕ'histĭ' nû^{n}ta-yu'tanatĭ'. Sgĕ'! tinû'lĭtgĭ'! Tleki'yu tsûtsestâ'gĭ hwĭnagĭ'. Yû!

Sgĕ! Higĕ'cya ts'sdi'ga ha-nâ'gwa da'tûlehû^{n}gû' kĭlû-gwû'. Iyû^{n}'ta tsûtu'tunasĭ' tăya'ĭ. Eska'niyŭ unayĕ'histĭ nû^{n}tayu'tanatĭ'. Sgĕ! tinû'lĭtgĭ'! Tleki'yu tsûtsestâ' hwĭnagĭ'. Yû!

Translation.

THIS IS TO MAKE CHIDREN JUMP DOWN.

Listen! You little man, get up now at once. There comes an old woman. The horrible [old thing] is coming, only a little way off. Listen! Quick! Get your bed and let us run away. Yû!

Listen! You little woman, get up now at once. There comes your grandfather. The horrible old fellow is coming only a little way off. Listen! Quick! Get your bed and let us run away. Yû!

Explanation.

In this formula for childbirth the idea is to frighten the child and coax it to come, by telling it, if a boy, that an ugly old woman is coming, or if a girl, that her grandfather is coming only a short distance away. The reason of this lies in the fact that an old woman is the terror of all the little boys of the neighborhood, constantly teasing and frightening them by declaring that she means to live until they grow up and then compel one of them to marry her, old and shriveled as she is. For the same reason the maternal grandfather, who is always a privileged character in the family, is especially dreaded by the little girls, and nothing will send a group of children running into the house more quickly than the announcement that an old "granny," of either sex is in sight.

As the sex is an uncertain quantity, the possible boy is always first addressed in the formulas, and if no result seems to follow, the doctor then concludes that the child is a girl and addresses her in similar tones. In some cases an additional formula with the beads is used to determine whether the child will be born alive or dead. In most

instances the formulas were formerly repeated with the appropriate ceremonies by some old female relative of the mother, but they are now the property of the ordinary doctors, men as well as women.

This formula was obtained from the manuscript book of A'yû'ⁿinĭ, who stated that the medicine used was a warm decoction of a plant called Dalâ'nige Unaste'tsĭ ("yellow root"—not identified), which was blown successively upon the top of the mother's head, upon the breast, and upon the palm of each hand. The doctor stands beside the woman, who is propped up in a sitting position, while repeating the first paragraph and then blows. If this produces no result he then recites the paragraph addressed to the girl and again blows. A part of the liquid is also given to the woman to drink. A'yû'ⁿinĭ claimed this was always effectual.

(HIĂ' TSUNSDI'GA DIL'TADI'NATANTI'YI. II.)

Hitsutsa, hitsu'tsa, tleki'yu, tleki'yu, ĕ'hinugâ'ĭ, ĕ'hinugâ'ĭ! Hi'-tsu'tsa, tleki'yu, gûltsû'tĭ, gûltsû'tĭ, tinagâ'na, tinagâ'na!

Higĕ'yu'tsa, higĕ'yu'tsa, tleki'yu, tleki'yu, ĕ'hinugâ'ĭ, ĕ'hinugâ'ĭ! Higè'yu'tsa, tleki'yu, gûⁿgu'stĭ, gûⁿgu'stĭ, tinagâ'na, tinagâ'na!

Translation.

THIS IS TO MAKE CHILDREN JUMP DOWN.

Little boy, little boy, hurry, hurry, come out, come out! Little boy, hurry; a bow, a bow; let's see who'll get it, let's see who'll get it!

Little girl, little girl, hurry, hurry, come out, come out. Little girl, hurry; a sifter, a sifter; let's see who'll get it, let's see who'll get it!

Explanation.

This formula was obtained from Takwati'hĭ, as given to him by a specialist in this line. Takwatihi himself knew nothing of the treatment involved, but a decoction is probably blown upon the patient as described in the preceding formula. In many cases the medicine used is simply cold water, the idea being to cause a sudden muscular action by the chilling contact. In this formula the possible boy or girl is coaxed out by the promise of a bow or a meal-sifter to the one who can get it first. Among the Cherokees it is common, in asking about the sex of a new arrival, to inquire, "Is it a bow or a sifter?" or "Is it ball sticks or bread?"

DALÂ'NI Ûⁿ-NĂGE'Ĭ ADANÛ'ⁿWÂTĬ.

Yuha'ahi', (yuha'ahi', yuha'ahi', yuha'ahi',)
Yuha'ahi', (yuha'ahi', yuha'ahi'), Yû!

Sgĕ! Ûⁿtal-e'gwâhĭ' didultâ'hĭstĭ ulsge'ta. Usĭnu'lĭ dâtitu'lene'ĭ. Usĭnu'lĭ dunu'y'tani'leĭ'.

Sgĕ! Ha-nâ'gwa statû'ⁿgani'ga, nûⁿdâ'yĭ distûl'tâ'histĭ, Stisga'ya Dĭst'sdi'ga, stida'wehi-gâgû. Ûⁿtal-e'gwa dâtitulene'(ĭ) ulsge'ta. Usĭnu'lĭ detĭstû'l'tani'ga ulsge'ta. Ditu'talenû'ⁿitsa nûⁿnâ'hĭ ᵛi'de'tu-

tanû'ⁿtasĭ', nûⁿtadu'ktahû'ⁿstĭ nige'sûⁿna. Nû''gĭ iyayû'ⁿlatăgĭ' ayâwe'sâlû'ⁿta de'dudûneli'sestĭ', Gû'ⁿtsatâtagi'yû tistadi'gûlahi'sestĭ. Tiduda'le'nû'(ĭ) û'ⁿtale'gwâ ʷᵎtĭ'stûl'tati'nûⁿtani'ga. Na''nă witûl'tâ'hĭstani'ga, tadu'ktahû'ⁿstĭ nige'sûⁿna. Ha-na''nă ʷᵎd'ultâhiste'stĭ. (Yû!)

(Degasisisgû'ⁿĭ)—Hiă' anine'tsĭ ga''tiskĭ adanû'ⁿwâtĭ. Ŭ'ⁿtla atsi'la tĭ''tĭ yĭ'gĭ.

Translation.

TO TREAT THE BLACK YELLOWNESS.

Yuha'ahi', yuha'ahi', yuha'ahi', yuha'ahi',
Yuha'ahi', yuha'ahi', yuha'ahi' Yû!

Listen! In the great lake the intruder reposes. Quickly he has risen up there. Swiftly he has come and stealthily put himself (under the sick man).

Listen! Ha! Now you two have drawn near to hearken, there in the Sun Land you repose, O Little Men, O great anida'wehi! The intruder has risen up there in the great lake. Quickly you two have lifted up the intruder. His paths have laid themselves down toward the direction whence he came. Let him never look back (toward us). When he stops to rest at the four gaps you will drive him roughly along. Now he has plunged into the great lake from which he came. There he is compelled to remain, never to look back. Ha! there let him rest. (Yû!)

(Directions.)—This is to treat them when their breast swells. Fire (coals) is not put down.

Explanation.

This formula, from A'yûⁿinĭ's manuscript, is used in treating a disease known as Dalâni, literally, "yellow." From the vague description of symptoms given by the doctors, it appears to be an aggravated form of biliousness, probably induced by late suppers and bad food. According to the Indian theory it is caused by revengeful animals, especially by the terrapin and its cousin, the turtle.

The doctors recognize several forms of the disease, this variety being distinguished as the "black dalâni (Dalâni Ûⁿnage'ĭ) and considered the most dangerous. In this form of dalânĭ, according to their account, the navel and abdomen of the patient swell, the ends of his fingers become black, dark circles appear about his eyes, and the throat contracts spasmodically and causes him to fall down suddenly insensible. A'yûⁿinĭ's method of treatment is to rub the breast and abdomen of the patient with the hands, which have been previously rubbed together in the warm infusion of wild cherry (ta'ya) bark. The song is sung while rubbing the hands together in the liquid, and the prayer is repeated while rubbing the swollen abdomen of the patient. The operation may be repeated several times on successive days.

The song at the beginning has no meaning and is sung in a low plaintive lullaby tone, ending with a sharp *Yu!* The prayer possesses a special interest, as it brings out several new points in the Cherokee mythologic theory of medicine. The "intruder," which

is held to be some amphibious animal—as a terrapin, turtle, or snake —is declared to have risen up from his dwelling place in the great lake, situated toward the sunset, and to have come by stealth under the sick man. The verb implies that the disease spirit *creeps under* as a snake might crawl under the coverlet of a bed.

The two Little Men in the Sun Land are now invoked to drive out the disease. Who these Little Men are is not clear, although they are regarded as most powerful spirits and are frequently invoked in the formulas. They are probably the two Thunder Boys, sons of Kanati.

The Little Men come instantly when summoned by the shaman, pull out the intruder from the body of the patient, turn his face toward the sunset, and begin to drive him on by threats and blows (expressed in the word gû'ⁿtsatatagi'yû) to the great lake from which he came. On the road there are four gaps in the mountains, at each of which the disease spirit halts to rest, but is continually forced onward by his two pursuers, who finally drive him into the lake, where he is compelled to remain, without being permitted even to look back again. The four gaps are mentioned also in other formulas for medicine and the ball play and sometimes correspond with the four stages of the treatment. The direction "No fire (coals) is put down" indicates that no live coals are put into the decoction, the doctor probably using water warmed in the ordinary manner.

Takwati'hĭ uses for this disease a decoction of four herbs applied in the same manner. He agrees with A'yûⁿinĭ in regard to the general theory and says also that the disease may be contracted by neglecting to wash the hands after handling terrapin shells, as, for instance, the shell rattles used by women in the dance. The turtle or water tortoise (seligu'gĭ) is considered as an inferior being, with but little capacity for mischief, and is feared chiefly on account of its relationship to the dreaded terrapin or land tortoise (tûksĭ'). In Takwatihĭ's formula he prays to the Ancient White (the fire), of which these cold-blooded animals are supposed to be afraid, to put the fish into the water, the turtle into the mud, and to send the terrapin and snake to the hillside.

TSUNDAYE'LIGAKTANÛ'HĬ ADANÛ'ᵊWÂTĬ.

Sgĕ! Hanâ'gwa hatû'ⁿganiga, galû'ⁿlatĭ hetsadâ'histĭ, Kâ'lanû Û'ⁿnage, gahu'stĭ tsanu'lahû'ⁿsgĭ nige'sûⁿna. Ha-nâ'gwa (hetsatsa'-ûⁿtani'ga. Hanigû'ⁿwatûⁿnigwălâe'stigwû tsalâsû'ⁿĭ. Asgin-u'danû higes'eĭ. Sanigala'gĭ gesû'ⁿĭ hastigû''lani'ga, duwâlu'wa'tû'tĭ nige'-sûⁿna, nitûneli'ga. Ha-Usûhi'yĭ wititâ'hĭstani'ga. Dadu'satahû'ⁿstĭ nige'sûⁿna nitû'neli'ga. Utsĭnă'wa nu'tatanû'ⁿta.

Sgĕ! Ha-nâ'gwa hatû'ⁿgani'ga, Kâ'lanû Gĭgage'ĭ, hidawĕhi'yu. Ha-gahu'stĭ tsanu'lahû'ⁿsgĭ nige'sûⁿna, etsanetse'lûhĭ. Ha-galûⁿlati'tsa hetsatâ'histĭ. Nâ'gwa hetsatsâ'ûⁿtani'ga. Nigû'ⁿwatû'ⁿnigwa-

lâe'sti-gwû tsalâsû'ⁿI. Asgin-udanû'hi-gwû higese'I. Ha-Sanigalâgĭ gesû'ⁿ hâstigû'ʻlani'ga ulsge'ta, ha-utsĭnă'wa-gwû' nigû'ⁿtisge'stĭ. Usûhi'yĭ wĭntûnè'dû. Usûhi'yĭ wĭtitâ'hĭstani'ga. Utsĭnă'wa adûⁿni'ga.

Sgĕ! Ha-nâ'gwa hatû'ⁿgani'ga, Kâ'lanû Sa'ka'ni; galû'latĭ hetsadâ'histĭ, hida'wĕhĭ. Gahu'stĭ tsanu'lahû'ⁿsgĭ nige'sûⁿna, etsanetse'lûhĭ. Ha-nâ'gwa hetsatsâ'ûⁿtani'ga. Nigû'ⁿwatû'ⁿnigwalâe'sti-gwû tsalâsû'ⁿI. Sanigalâ'gĭ gesû'ⁿ hastigû'ʻlani'ga ulsge'ta. Duwâlu'watû'tĭ nige'sûⁿna, nitû'neli'ga. Usûhi'yĭ wĭtitâ'hĭstani'ga, dadu'satahû'ⁿstĭ nige'sûⁿna nitû'neli'ga. Utsĭnă'wa adûⁿni'ga.

Sgĕ! Ha-nâ'gwa hatû'ⁿgani'ga, Wa'hĭlĭ galûⁿlti'tsa hetsadâ'histĭ, Kâ'lanû Tsûne'ga, hida'wĕhĭ. Gahu'stĭ tsanu'lʻtĭ nige'sûⁿna. Hanâ'gwa hetsatsâ'ûⁿtani'ga. Nigû'ⁿwatû'ⁿnigwalâe'sti-gwû tsalâsû'ⁿI. Ha-nâ'gwa detalʻtani'ga. Sanigalâ'gĭ gesû'ⁿ hastig'ûʻlani'ga ulsge'ta, duwâlu'watû'ʻtĭ nige'sûⁿna nitû'neli'ga. Usûhi'yĭ wĭtitâ'hĭstani'ga. Dadu'satahû'ⁿstĭ nige'sûⁿna nitû'neli'ga. Utsĭnă'wa adûⁿni'ga.

(Dega'sisisgû'ⁿI)—Hiă' agiʻli'ya unitlûⁿgû'ⁿI adanû'wâtĭ. Askwanu'tsastĭ'. Tsâ'l(a) Agayû'ⁿlĭ unitsi'lûⁿnû'hĭ gû'ⁿtatĭ, anû'ⁿsgaʻlâ'-gwû; Kanasâ'la-ʻnû unali'gâhû, ade'la'-ʻnû nû'ʻgi-gwû ani'gage'I dahâ'I, Tsâliyu'stĭ-ʻnû Usdi'ga. Gahu'sti-'ʻnu yuta'suyû'ⁿna sâwatu'hi-gwû atĭ' dawâ'hila-gwû iyû'ⁿta.

Translation.

TO TREAT FOR ORDEAL DISEASES.

Listen! Ha! Now you have drawn near to hearken and are resting directly overhead. O Black Raven, you never fail in anything. Ha! Now you are brought down. Ha! There shall be left no more than a trace upon the ground where you have been. It is an evolute ghost. You have now put it into a crevice in Sanigalagi, that it may never find the way back. You have put it to rest in the Darkening Land, so that it may never return. Let relief come.

Listen! Ha! Now you have drawn near to hearken, O Red Raven, most powerful ada'wehi. Ha! You never fail in anything, for so it was ordained of you. Ha! You are resting directly overhead. Ha! Now you are brought down. There shall remain but a trace upon the ground where you have been. It is an evolute ghost. Ha! You have put the Intruder into a crevice of Sanigalagi and now the relief shall come. It (the Intruder) is sent to the Darkening Land. You have put it to rest in the Darkening Land. Let the relief come.

Listen! Ha! Now you have drawn near to hearken, O Blue Raven; you are resting directly overhead, ada'wehi. You never fail in anything, for so it was ordained of you. Ha! Now you are brought down. There shall be left but a trace upon the ground where you have been. You have put the Intruder into a crevice in Sanigalagi, that it may never find the way back. You have put it to rest in the Darkening Land, so that it may never return. Let the relief come.

Listen! Ha! Now you have drawn near to hearken; you repose on high on Wa'hĭlĭ, O White Raven, ada'wehi. You never fail in anything. Ha! Now you are brought down. There shall be left but a trace upon the ground where you have been. Ha! Now you have taken it up. You have put the Intruder into a crevice in Sanigalagi, that it may never find the way back. You have put it to rest in the Darkening Land, never to return. Let the relief come.

(Directions)—This is to treat them for a painful sickness. One must suck. Use Tsâ'lagayû^{n}'-li ("Old Tobacco"—Nicotiana rustica), blossoms, and just have them in the mouth, and Kanasâ'la (Wild Parsnip), goes with it, and four red beads also must lie there, and Tsâliyu'sti Usdi'ga ("Little (plant) Like Tobacco"—Indian Tobacco—Lobelia inflata.) And if there should be anything mixed with it (i. e., after sucking the place), just put it about a hand's-length into the mud.

Explanation.

The Cherokee name for this disease gives no idea whatever of its serious nature. The technical term, Tsundaye'liga'ktanû'hĭ, really refers to the enthusiastic outburst of sociability that ensues when two old friends meet. In this instance it might be rendered "an ordeal." The application of such a name to what is considered a serious illness is in accordance with the regular formulistic practice of making light of a dangerous malady in order to convey to the disease spirit the impression that the shaman is not afraid of him. A'yû^{n}inĭ, from whom the formula was obtained, states also that the disease is sometimes sent to a man by a friend or even by his parents, in order to test his endurance and knowledge of counter spells.

As with most diseases, the name simply indicates the shaman's theory of the occult cause of the trouble, and is no clue to the symptoms, which may be those usually attendant upon fevers, indigestion, or almost any other ailment.

In some cases the disease is caused by the conjurations of an enemy, through which the patient becomes subject to an inordinate appetite, causing him to eat until his abdomen is unnaturally distended. By the same magic spells tobacco may be conveyed into the man's body, causing him to be affected by faintness and languor. The enemy, if bitterly revengeful, may even put into the body of his victim a worm or insect (tsgâya), or a sharpened stick of black locust or "fat" pine, which will result in death if not removed by a good doctor. Sometimes a weed stalk is in some occult manner conveyed into the patient's stomach, where it is transformed into a worm. As this disease is very common, owing to constant quarrels and rival jealousies, there are a number of specialists who devote their attention to it.

The prayer is addressed to the Black, Red, Blue, and White Ravens, their location at the four cardinal points not being specified, excepting in the case of the white raven of Wa'hilĭ, which, as already stated, is said to be a mountain in the south, and hence is used figuratively to mean the south. The ravens are each in turn declared to have put the disease into a crevice in Sanigala'gi—the Cherokee name of Whiteside Mountain, at the head of Tuckasegee River, in North Carolina, and used figuratively for any high precipitous mountain—and to have left no more than a trace upon the ground where it has been. The adjective translated "evolute" (udanûhĭ) is of frequent occurrence in the formulas, but has no

exact equivalent in English. It signifies springing into being or life from an embryonic condition. In this instance it would imply that whatever object the enemy has put into the body of the sick man has there developed into a ghost to trouble him.

The directions are expressed in a rather vague manner, as is the case with most of A'yûⁿini's attempts at original composition. The disease is here called by another name, agi'li'ya unitlûⁿgû'ⁿI, signifying "when they are painfully sick." The treatment consists in sucking the part most affected, the doctor having in his mouth during the operation the blossoms of Tsâ'l-agayû'ⁿlĭ (Nicotiana rustica), Kanasâ'la (wild parsnip,) and Tsâliyusti Usdiga (Lobelia inflata.) The first and last of these names signify "tobacco" and "tobacco-like," while the other seems to contain the same word, tsâ'la, and the original idea may have been to counteract the witchcraft by the use of the various species of "tobacco," the herb commonly used to drive away a witch or wizard. During the sucking process four red beads lie near upon a piece of (white) cloth, which afterward becomes the perquisite of the doctor. Though not explicitly stated, it is probable that the doctor holds in his mouth a decoction of the blossoms named, rather than the blossoms themselves. On withdrawing his mouth from the spot and ejecting the liquid into a bowl, it is expected that there will be found "mixed" with it a small stick, a pebble, an insect, or something of the kind, and this the shaman then holds up to view as the cause of the disease. It is afterward buried a "hand's length" (awâ'hilû)[1] deep in the mud. No directions were given as to diet or tabu.

HUNTING.

GÛNÂ'HILÛ'ᵊTA UGÛ'ᵊWA'LĬ.

Una'lelŭ' eskiska'l'tasĭ'. Iskwa'lelŭ eskiska'l'tasĭ'. Yû! Ela-Kana'tĭ tsûldâ'hĭstû'ⁿ, tsûwatsi'la astû'ⁿ detsatasi'ga. Ts'skwâ'lĭ uda'nisă''testĭ, ugwala'ga udu'yaheti'dege'stĭ. Sunûsi'ya-gwû udanisă''testĭ, ts'su'lti-gwû nige'sûⁿna.

Hĭkayû'ⁿlĭ Gi'gage-gâgû', tsine'tsĭ gesû'ⁿ aw'stitege'stĭ. *Tsăstû' utatiyĭ*, nâ'gwa *tsăs'tû gasû'hisă'tĭ atisge'stĭ*. Ha-nâ'gwa nûⁿnâ tsusdi' tutana'wa-tegû' *digana'watû'ⁿta* atisge'stĭ. Utalĭ' udanû'hĭ ugwala'ga gûⁿwatuy'ahĭti'tege'stĭ, hĭlahiyû'ⁿta-gwû ᵛustû''stĭ nige'sûⁿna. D'stiskwâ'lĭ deudû'nisă'te'stĭ. Yû!

Translation.

CONCERNING HUNTING.

Give me the wind. Give me the breeze. Yû! O Great Terrestrial Hunter, I come to the edge of your spittle where you repose. Let your stomach cover itself; let it be covered with leaves. Let it cover itself at a single bend, and may you never be satisfied.

[1] This word, like the expression "seven days," frequently has a figurative meaning. Thus the sun is said to be seven awâ'hilû above the earth.

And you, O Ancient Red, may you hover above my breast while I sleep. Now let good (dreams?) develop; let my experiences be propitious. Ha! Now let my little trails be directed, as they lie down in various directions(?). Let the leaves be covered with the clotted blood, and may it never cease to be so. You two (the Water and the Fire) shall bury it in your stomachs. Yû!

Explanation.

This is a hunting formula, addressed to the two great gods of the hunter, Fire and Water. The evening before starting the hunter "goes to water," as already explained, and recites the appropriate formula. In the morning he sets out, while still fasting, and travels without eating or drinking until nightfall. At sunset he again goes to water, reciting this formula during the ceremony, after which he builds his camp fire, eats his supper and lies down for the night, first rubbing his breast with ashes from the fire. In the morning he starts out to look for game.

"Give me the wind," is a prayer that the wind may be in his favor, so that the game may not scent him. The word rendered here "Great Terrestrial Hunter," is in the original "Ela-Kana'tĭ." In this *e'la* is the earth and *kana'tĭ* is a term applied to a successful hunter. The great Kanatĭ, who, according to the myth, formerly kept all the game shut up in his underground caverns, now dwells above the sky, and is frequently invoked by hunters. The raven also is often addressed as Kanatĭ in these hunting formulas. Ela-Kana'tĭ, the Great Terrestrial Hunter—as distinguished from the other two—signifies the river, the name referring to the way in which the tiny streams and rivulets search out and bring down to the great river the leaves and débris of the mountain forests. In formulas for medicine, love, the ball play, etc., the river is always addressed as the Long Person (Yû'ⁿwĭ Gûnahi'ta). The "spittle" referred to is the foam at the edge of the water. "Let your stomach be covered with leaves" means, let the blood-stained leaves where the stricken game shall fall be so numerous as to cover the surface of the water. The hunter prays also that sufficient game may be found in a single bend of the river to accomplish this result without the necessity of searching through the whole forest, and to that end he further prays that the river may never be satisfied, but continually longing for more. The same idea is repeated in the second paragraph. The hunter is supposed to feed the river with blood washed from the game. In like manner he feeds the fire, addressed in the second paragraph as the "Ancient Red," with a piece of meat cut from the tongue of the deer. The prayer that the fire may hover above his breast while he sleeps and brings him favorable dreams, refers to his rubbing his breast with ashes from his camp fire before lying down to sleep, in order that the fire may bring him dream omens of success for the morrow. The Fire is addressed either as the Ancient White or the

Ancient Red, the allusion in the first case being to the light or the ashes of the fire; in the other case, to the color of the burning coals. "You two shall bury it in your stomachs" refers to the blood-stained leaves and the piece of meat which are cast respectively into the river and the fire. The formula was obtained from A'yûⁿinĭ, who explained it in detail.

HIĂ' TSI'SKWA GANÂHILIDASTI·YĬ.

Tsĭgĕ'! Hĭkayû'ⁿl-Une'ga, tsûltâ'histû'ⁿ gûlitâ'hĭstani'ga. Nâ'gwa tsûda'ntâ talehĭ'sani'ga. Sâ'gwa igûnsi'ya ts'skwâlĭ' udû'nisate'stĭ, ts'su'ltĭ nige'sûⁿna. Wane'(ĭ) tigi'gage(ĭ) tali'kanĕli'ga. ᵘ'ⁿtalĭ udanû'hĭ tsăgista''tĭ.

Hĭkayû'ⁿl-Une'ga, *anu'ya uwâtatâ'gĭ agi'stĭ tătsiskâ'ltane'lûhĭ.* ᵘ'ⁿtalĭ u'danû' *te'tûlskew'si'ga.*

Hĭkayû'ⁿl-Une'ga, nûⁿnâ'(hĭ) kana'tĭ skwatetâ'stani'ga. Unigwalû'ⁿgĭ te'gatûⁿtsi'ga. Nûⁿnâ'(hĭ) kana'tĭ tati'kiyû'ⁿgwita'watise'stĭ. Unigwalû'ⁿgĭ tigû'ⁿwatû'tsanû'hĭ.

Hĭkayû'ⁿl-Une'ga, Kana'tĭ, sk'salatâ'titege'stĭ, sa'ka'ni ginu't'tĭ nige'sûⁿna. Sgĕ!

Translation.

THIS IS FOR HUNTING BIRDS.

Listen! O Ancient White, where you dwell in peace I have come to rest. Now let your spirit arise. Let it (the game brought down) be buried in your stomach, and may your appetite never be satisfied. The red hickories have tied themselves together. The clotted blood is your recompense.

O Ancient White, * * * Accept the clotted blood (?)

O Ancient White, put me in the successful hunting trail. Hang the mangled things upon me. Let me come along the successful trail with them doubled up (under my belt). It (the road) is clothed with the mangled things.

O Ancient White, O Kanati, support me continually, that I may never become blue. Listen!

Explanation.

This formula, from A'yûⁿinĭ's manuscript, is recited by the bird-hunter in the morning while standing over the fire at his hunting camp before starting out for the day's hunt. A'yû'ⁿinĭ stated that seven blowgun arrows are first prepared, including a small one only a "hand-length" (awâ'hilû) long. On rising in the morning the hunter, standing over the fire, addresses it as the "Ancient White." rubbing his hands together while repeating the prayer. He then sets out for the hunting ground, where he expects to spend the day, and on reaching it he shoots away the short arrow at random, without attempting to trace its flight. There is of course some significance attached to this action and perhaps an accompanying prayer, but no further information upon this point was obtainable. Having shot away the magic arrow, the hunter utters a peculiar hissing

sound, intended to call up the birds, and then goes to work with his remaining arrows. On all hunting expeditions it is the regular practice, religiously enforced, to abstain from food until sunset.

A favorite method with the bird-hunter during the summer season is to climb a gum tree, which is much frequented by the smaller birds on account of its berries, where, taking up a convenient position amid the branches with his noiseless blowgun and arrows, he deliberately shoots down one bird after another until his shafts are exhausted, when he climbs down, draws out the arrows from the bodies of the birds killed, and climbs up again to repeat the operation. As the light darts used make no sound, the birds seldom take the alarm, and are too busily engaged with the berries to notice their comrades dropping to the ground from time to time, and pay but slight attention even to the movements of the hunter.

The prayer is addressed to the Ancient White (the Fire), the spirit most frequently invoked by the hunter, who, as before stated, rubs his hands together over the fire while repeating the words. The expressions used are obscure when taken alone, but are full of meaning when explained in the light of the hunting customs. The "clotted blood" refers to the bloodstained leaves upon which the fallen game has lain. The expression occurs constantly in the hunting formulas. The hunter gathers up these bloody leaves and casts them upon the fire, in order to draw omens for the morrow from the manner in which they burn. A part of the tongue, or some other portion of the animal, is usually cast upon the coals also for the same purpose. This subject will be treated at length in a future account of the hunting ceremonies.

"Let it be buried in your stomach" refers also to the offering made the fire. By the red hickories are meant the strings of hickory bark which the bird hunter twists about his waist for a belt. The dead birds are carried by inserting their heads under this belt. Red is, of course, symbolic of his success. "The mangled things" (unigwalû'ⁿgĭ) are the wounded birds. Kana'tĭ is here used to designate the fire, on account of its connection with the hunting ceremonies.

INAGĔ'HĬ AYÂSTI·YĬ.

Usĭnuli'yu Selagwû'tsĭ Gigage'ĭ getsû'ⁿneliga tsûdandâgi'hĭ aye'li'yu, usĭnuli'yu. Yû!

Translation.

TO SHOOT DWELLERS IN THE WILDERNESS.

Instantly the Red Selagwû'tsĭ strike you in the very center of your soul—instantly. Yû!

Explanation.

This short formula, obtained from A'wani'ta, is recited by the hunter while taking aim. The bowstring is let go—or, rather, the trigger is pulled—at the final *Yû!* He was unable to explain the meaning of the word selagwû'tsĭ further than that it referred to the bullet. Later investigation, however, revealed the fact that this is the Cherokee name of a reed of the genus Erianthus, and the inference follows that the stalk of the plant was formerly used for arrow shafts. Red implies that the arrow is always successful in reaching the mark aimed at, and in this instance may refer also to its being bloody when withdrawn from the body of the animal. Inagĕ'hĭ, "dwellers in the wilderness," is the generic term for game, including birds, but A'wani'ta has another formula intended especially for deer.

(YÂ'NA TĬ'KANÂGI'TA.)

He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.

Tsistuyi' nehandu'yanû, Tsistuyi' nehandu'yanû—Yoho'+!

He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.

Kuwâhi' nehandu'yanû', Kuwâhi' nehandu'yanû—Yoho'+!

He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.

Uyâ'ye' nehandu'yanû', Uya'ye' nehandu'yanû'—Yoho'+!

He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.

Gâtekwâ'(hĭ) nehandu'yanû', Gâtekwâ'(hĭ) nehandu'yanû'—Yoho'+!

Ûlĕ-'nû' asĕhĭ' tadeya'statakûhĭ' gû'ⁿnage astû'tsĭkĭ'.

Translation.

BEAR SONG.

He! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
In Rabbit Place you were conceived (repeat)—Yoho'+!
He! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
In Mulberry Place you were conceived (repeat)—Yoho'+!
He! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
In Uyâ''yĕ you were conceived (repeat)—Yoho'+!
He! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
In the Great Swamp (?) you were conceived (repeat)—Yoho'+!
And now surely we and the good black things, the best of all, shall see each other.

Explanation.

This song, obtained from A'yû'ⁿinĭ in connection with the story of the Origin of the Bear, as already mentioned, is sung by the bear hunter, in order to attract the bears, while on his way from the camp to the place where he expects to hunt during the day. It is one of those taught the Cherokees by the Ani-Tsâ'kahĭ before they lost their human shape and were transformed into bears. The melody is simple and plaintive.

The song consists of four verses followed by a short recitation. Each verse begins with a loud prolonged *He*+! and ends with *Yoho'*+! uttered in the same manner. Hayuya'haniwă' has no meaning. Tsistu'yĭ, Kuwâ'hĭ, Uyâ''yĕ, and Gâte'kwâhĭ are four mountains, in each of which the bears have a townhouse and hold a dance before going into their dens for the winter. The first three named are high peaks in the Smoky Mountains, on the Tennessee line, in the neighborhood of Clingman's Dome and Mount Guyot. The fourth is southeast of Franklin, North Carolina, toward the South Carolina line, and may be identical with Fodderstack Mountain. In Kuwahi dwells the great bear chief and doctor, in whose magic bath the wounded bears are restored to health. They are said to originate or be conceived in the mountains named, because these are their headquarters. The "good black things" referred to in the recitation are the bears.

HIĂ' ATSŬ''TI'YĬ TSUN'TANÛ.

Sgĕ! Nâ'gwa hitsatû'ⁿgani'ga hitsiga'tugĭ'. Tĭtsila'wisû'ⁿhĭ ᵘwâgi''lĭ tege'tsûts'gû''lawĭstĭ'. Tsuli'stana'lû ûlĕ' waktûĭ, agi'stĭ une'ka itsû'ⁿyatanilû'ĭstani'ga. Gûⁿwatu'hwĭtû' nûⁿnâ'hĭ degûndâltsi'dâhe'stĭ. ᵘWâ'hisâ'nahĭ tigiwatsi'la. Tutsegû''lawistĭ'tege'stĭ. Ûⁿtalĭ' degû'ⁿwatanûhĭ, uhisa''tĭ nige'sûⁿna. Tsuwatsi'la dadâl'tsi'ga. A'yû A'yû'ⁿinĭ tigwadâ'ita. Yû!

Translation.

THIS IS FOR CATCHING LARGE FISH.

Listen! Now you settlements have drawn near to hearken. Where you have gathered in the foam you are moving about as one. You Blue Cat and the others, I have come to offer you freely the white food. Let the paths from every direction recognize each other. Our spittle shall be in agreement. Let them (your and my spittle) be together as we go about. They (the fish) have become a prey and there shall be no loneliness. Your spittle has become agreeable. I am called Swimmer. Yû!

Explanation.

This formula, from A'yûⁿinĭ's' book, is for the purpose of catching large fish. According to his instructions, the fisherman must first chew a small piece of Yugwilû' (Venus' Flytrap—Dionæa muscipula) and spit it upon the bait and also upon the hook. Then, standing

facing the stream, he recites the formula and puts the bait upon the hook. He will be able to pull out a fish at once, or if the fish are not about at the moment they will come in a very short time.

The Yugwilû' is put upon the bait from the idea that it will enable the hook to attract and hold the fish as the plant itself seizes and holds insects in its cup. The root is much prized by the Cherokees for this purpose, and those in the West, where the plant is not found, frequently send requests for it to their friends in Carolina.

The prayer is addressed directly to the fish, who are represented as living in settlements. The same expression as has already been mentioned is sometimes used by the doctors in speaking of the *tsgâ'ya* or worms which are supposed to cause sickness by getting under the skin of the patient. The Blue Cat (*Amiurus, genus*) is addressed as the principal fish and the bait is spoken of as the "white food," an expression used also of the viands prepared at the feast of the green corn dance, to indicate their wholesome character. "Let the paths from every direction recognize each other," means let the fishes, which are supposed to have regular trails through the water, assemble together at the place where the speaker takes his station, as friends recognizing each other at a distance approach to greet each other, ᵘWâhisâ'nahĭ tigiwatsi'la, rendered "our spittle shall be in agreement," is a peculiar archaic expression that can not be literally translated. It implies that there shall be such close sympathy between the fisher and the fish that their spittle shall be as the spittle of one individual. As before stated, the spittle is believed to exert an important influence upon the whole physical and mental being. The expression "your spittle has become agreeable" is explained by A'yûⁿinĭ as an assertion or wish that the fish may prove palatable, while the words rendered "there shall be no loneliness" imply that there shall be an abundant catch.

LOVE.

(YÛ·WĔ'HĬ UGÛ'·WA'LĬ I.)

Ku! Sgĕ! *Alahi'yĭ* tsûl'dâ'histĭ, Higĕ''ya tsûl'di'yĭ, hatûⁿgani'ga. *Elahi'yĭ* iyûⁿta ditsûl'dâ'histĭ, Higĕ''ya Tsûne'ga. Tsisa''tĭ nige'sûⁿna. Tsâduhi'yĭ. Nâ'gwa-skĭn'ĭ usĭnuli'yu hûⁿskwane''lûⁿgû' tsisga'ya agine'ga. Agisa''tĭ nige'sûⁿna. Nâ'gwa nûⁿnâ une'ga hûⁿskwanûⁿneli'ga. Uhisa''tĭ nige'sûⁿna. Nâ'gwa skwade'tastani'ga. Sa'ka'ni u'tatĭ nige'sûⁿna. Nûⁿnâ une'ga skiksa''ûⁿtaneli'ga. Elaye''lĭ iyûⁿta skwalewistă''tani'ga E'latĭ gesûⁿ tsĭtage'stĭ. Agisa''tĭ nige'sûⁿna. Agwâ'duhi'yu. Kûltsâ'te une'ga skiga''tani'ga. Uhisa''tĭ nige'sûⁿna, gûⁿkwatsâti'tege'stĭ. Tsi-sa'ka'ni agwă'tatĭ nige'sûⁿna. Usĭnuli'yu hûⁿskwane''lûⁿgû'.

Ha-nâ'gwûlĕ *Elahi'yĭ* iyûⁿtă dûhiyane''lûⁿgû' a'gĕ''ya sa'ka'ni. Nâ'gwa nûⁿnâ'hĭ sa'ka'ni hûⁿtane''laneli'ga. Uhisa''tĭ-gwû u'danû dudusa'gĭ tanela'sĭ. Nûⁿnâ'hĭ sa'ka'nĭ tade'tâstani'ga. Nâgwûlĕ'

hûⁿhiyatsâ'ûⁿtaniga. E'latĭ gesû'ⁿ tû'l'taniga. Dedu'laskû'ⁿ-gwû igû'ⁿwa'lawĭ'stĭ uhi'sa'ti'yĭ widaye'la'ni'ga. Dedulaskû'ⁿ-gwû igû'ⁿ-wa'lawĭ'stĭ uhi'sa'ti'yĭ nitû'ⁿneli'ga.

Ha-sâgwahi'yu itsilasta'lagĭ + + uwă'sahi'yu, etsane''laneli'ga. Agisa''tĭ nige'sûⁿna. Agwâ'duhĭ. A'yû agwadantâ'gĭ aye'li'yu d'ka''lani'lĭ duda'ntâ, uktahû'ⁿstĭ nige'sûⁿna. Yû'ⁿwĭ tsu'tsatûⁿ widudante''tĭ nige'sûⁿna, nitû'ⁿneli'ga. Sâ'gwahĭ itsilasta'lagĭ, etsane''laneli'ga kûlkwâ'gi-nasĭ' igûlstû''lĭ gegane''lanû'ⁿ.

Anisga'ya anewadi'sûⁿ unihisa'ti'yĭ. Tsu'nada'neilti'yĭ. Dĭ'la-gwû degû'ⁿwănatsegû''lawi'sdidegû'. Ayâ'ise'ta-gwû u'danû. Tsu-nada'neilti'yĭ. Utse'tsti-gwû degû'ⁿwănatsegû''lawis'didegû'. Tsu-nada'neilti'yĭ. Ka'ga-gwû degû'ⁿwănatsegû''awisdidegû'. Tsuna-da'neilti'yĭ. Da'l'ka-gwû degû'ⁿwănatsegû''lawisdidegû'.

Kûlkwâ'gĭ igûlsta'lagĭ unihisa'ti'yu. Ige'ski-gwû nige'sûⁿna. Ayâ'-ise'ta-gwû u'danû degû'ⁿwănatsûn'ti-degû'. K'si-gwû degû'ⁿwă-natsûn'ti-degû'. A'yagâgû' tsisga'ya agine'ga ûⁿgwane''lanû'hĭ + + Nûⁿdâgû'ⁿyĭ iti'tsa ditsidâ'ga. Agisa''tĭ nige'sûⁿna. Agwâdu-hi'yu. Tsi-sa'ka'nĭ agwă'tatĭ nige'sûⁿna. Kûltsâ'te une'ga ûⁿni'ta-gâgû' gûkwatsâ'nti-degû'. Agisă''tĭ nige'sûⁿna. A'yû agwadan-tâ'gĭ aye'li'yu gûlasi'ga tsûda'ntâ, uktahû'ⁿstĭ nige'sûⁿna. A'yû tsĭ'gĭ tsûda'nta 0 0. Sgĕ!

Translation.

CONCERNING LIVING HUMANITY (LOVE).

Kû! Listen! In Alahi'yĭ you repose, O Terrible Woman, O you have drawn near to hearken. There in Elahiyĭ you are at rest, O White Woman. No one is ever lonely when with you. You are most beautiful. Instantly and at once you have rendered me a white man. No one is ever lonely when with me. Now you have made the path white for me. It shall never be dreary. Now you have put me into it. It shall never become blue. You have brought down to me from above the white road. There in mid-earth (mid-surface) you have placed me. I shall stand erect upon the earth. No one is ever lonely when with me. I am very handsome. You have put me into the white house. I shall be in it as it moves about and no one with me shall ever be lonely. Verily, I shall never become blue. Instantly you have caused it to be so with me.

And now there in Elahiyĭ you have rendered the woman blue. Now you have made the path blue for her. Let her be completely veiled in loneliness. Put her into the blue road. And now bring her down. Place her standing upon the earth. Where her feet are now and wherever she may go, let loneliness leave its mark upon her. Let her be marked out for loneliness where she stands.

Ha! I belong to the (Wolf) (+ +) clan, that one alone which was allotted into for you. No one is ever lonely with me. I am handsome. Let her put her soul the very center of my soul, never to turn away. Grant that in the midst of men she shall never think of them. I belong to the one clan alone which was allotted for you when the seven clans were established.

Where (other) men live it is lonely. They are very loathsome. The common polecat has made them so like himself that they are fit only for his company. They have became mere refuse. They are very loathsome. The common oppossum has made them so like himself that they are fit only to be with him. They are very

loathsome. Even the crow has made them so like himself that they are fit only for his company. They are very loathsome. The miserable rain-crow has made them so like himself that they are fit only to be with him.

The seven clans all alike make one feel very lonely in their company. They are not even good looking. They go about clothed with mere refuse. They even go about covered with dung. But I—I was ordained to be a white man. I stand with my face toward the Sun Land. No one is ever lonely with me. I am very handsome. I shall certainly never become blue. I am covered by the everlasting white house wherever I go. No one is ever lonely with me. Your soul has come into the very center of my soul, never to turn away. I—(Gatigwanasti,) (0 0)—I take your soul. Sgĕ!

Explanation.

This unique formula is from one of the loose manuscript sheets of Gatigwanasti, now dead, and belongs to the class known as Yûⁿwĕ'hĭ or love charms (literally, concerning "living humanity"), including all those referring in any way to the marital or sexual relation. No explanation accompanies the formula, which must therefore be interpreted from analogy. It appears to be recited by the lover himself—not by a hired shaman—perhaps while painting and adorning himself for the dance. (*See next two formulas.*)

The formula contains several obscure expressions which require further investigation. Elahiyĭ or Alahiyĭ, for it is written both ways in the manuscript, does not occur in any other formula met with thus far, and could not be explained by any of the shamans to whom it was submitted. The nominative form may be Elahĭ, perhaps from *ela*, "the earth," and it may be connected with Wa'hĭlĭ, the formulistic name for the south. The spirit invoked is the White Woman, white being the color denoting the south.

Uhisa''tĭ, rendered here "lonely," is a very expressive word to a Cherokee and is of constant recurrence in the love formulas. It refers to that intangible something characteristic of certain persons which inevitably chills and depresses the spirits of all who may be so unfortunate as to come within its influence. Agisa''tĭ nige'sûⁿna, "I never render any one lonely," is an intensified equivalent for, "I am the best company in the world," and to tell a girl that a rival lover is uhisa''tĭ is to hold out to her the sum of all dreary prospects should she cast in her lot with him.

The speaker, who evidently has an exalted opinion of himself, invokes the aid of the White Woman, who is most beautiful and is never uhisa''tĭ. She at once responds by making him a white—that is, a happy—man, and placing him in the white road of happiness, which shall never become blue with grief or despondency. She then places him standing in the middle of the earth, that he may be seen and admired by the whole world, especially by the female portion. She finally puts him into the white house, where happiness abides forever. The verb implies that the house shelters him like a cloak and goes about with him wherever he may go.

There is something comical in the extreme self-complacency with which he asserts that he is very handsome and will never become blue and no one with him is ever lonely. As before stated, white signifies peace and happiness, while blue is the emblem of sorrow and disappointment.

Having thus rendered himself attractive to womankind, he turns his attention to the girl whom he particularly desires to win. He begins by filling her soul with a sense of desolation and loneliness. In the beautiful language of the formula, her path becomes blue and she is veiled in loneliness. He then asserts, and reiterates, that he is of the one only clan which was allotted for her when the seven clans were established.

He next pays his respects to his rivals and advances some very forcible arguments to show that she could never be happy with any of them. He says that they are all "lonesome" and utterly loathsome—the word implies that they are mutually loathsome—and that they are the veriest trash and refuse. He compares them to so many polecats, oppossums, and crows, and finally likens them to the rain-crow (cuckoo; *Coccygus*), which is regarded with disfavor on account of its disagreeable note. He grows more bitter in his denunciations as he proceeds and finally disposes of the matter by saying that all the seven clans alike are uhisa'ʻtĭ and are covered with filth. Then follows another glowing panegyric of himself, closing with the beautiful expression, "your soul has come into the very center of mine, never to turn away," which reminds one forcibly of the sentiment in the German love song, "Du liegst mir im Herzen." The final expression, "I take your soul," implies that the formula has now accomplished its purpose in fixing her thoughts upon himself.

When successful, a ceremony of this kind has the effect of rendering the victim so "blue" or lovesick that her life is in danger until another formula is repeated to make her soul "white" or happy again. Where the name of the individual or clan is mentioned in these formulas the blank is indicated in the manuscript by crosses + + or ciphers 0 0 or by the word iyu'stĭ, "like."

HI'Ă ĂMA'YĬ Ă'TAWASTI'YĬ KANÂ'HEHÛ.

Sgĕ! Ha-nâ'gwa usĭnuli'yu hatû'ⁿgani'ga *Higĕ''yagu'ga*, tsûwatsi'la gi'gage tsiye'la skĭna'dû'lani'ga. 0 0 digwadâ'ita. Sa'ka'nĭ tûgwadûne'lûhĭ. Atsanû'ⁿgĭ gi'gage skwâsû'hisaᶜtani'ga. + + kûlstă'lagĭ + sa'ka'nĭ nu'tatanû'ⁿta. Ditu'nûⁿnâ'gĭ dagwû'laskû'ⁿgwû deganu'y'tasi'ga. Galâ'nûⁿtse'ta-gwû dagwadûne'lidise'stĭ. Sgĕ!

Translation.

THIS TELLS ABOUT GOING INTO THE WATER.

Listen! O, now instantly, you have drawn near to hearken, O Agĕ''yagu'ga. You have come to put your red spittle upon my body. My name is (Gatigwanasti.) The blue had affected me. You have come and clothed me with a red dress. She is of the (Deer) clan. She has become blue. You have directed her paths straight to where I have my feet, and I shall feel exultant. Listen!

Explanation.

This formula, from Gatigwanasti's book, is also of the Yû^{n}wĕ'hĭ class, and is repeated by the lover when about to bathe in the stream preparatory to painting himself for the dance. The services of a shaman are not required, neither is any special ceremony observed. The technical word used in the heading, ă'tawasti'yĭ, signifies plunging or going entirely into a liquid. The expression used for the ordinary "going to water," where the water is simply dipped up with the hand, is ămâ'yĭ dita'ti'yĭ, "taking them to water."

The prayer is addressed to Agĕ''yaguga, a formulistic name for the moon, which is supposed to exert a great influence in love affairs, because the dances, which give such opportunities for love making, always take place at night. The shamans can not explain the meaning of the term, which plainly contains the word agĕ''ya, "woman," and may refer to the moon's supposed influence over women. In Cherokee mythology the moon is a man. The ordinary name is nû'^{n}dâ, or more fully, nû'^{n}dâ sû^{n}nâyĕ'hĭ, "the sun living in the night," while the sun itself is designated as nû'^{n}dâ igĕ'hĭ, "the sun living in the day."

By the red spittle of Agĕ''yagu'ga and the red dress with which the lover is clothed are meant the red paint which he puts upon himself. This in former days was procured from a deep red clay known as ela-wâ'tĭ, or "reddish brown clay." The word red as used in the formula is emblematic of success in attaining his object, besides being the actual color of the paint. Red, in connection with dress or ornamentation, has always been a favorite color with Indians throughout America, and there is some evidence that among the Cherokees it was regarded also as having a mysterious protective power. In all these formulas the lover renders the woman blue or disconsolate and uneasy in mind as a preliminary to fixing her thoughts upon himself. (*See next formula.*)

(YÛ'^{n}WĔ'HĬ UGÛ'^{n}WA'LĬ II.)

Yû'^{n}wĕhĭ, yû'^{n}wĕhĭ, yû'^{n}wĕhĭ, yû'^{n}wĕhĭ.

Galû'^{n}latĭ, datsila'ĭ—Yû'^{n}wĕhĭ, yû'^{n}wèhĭ, yû'^{n}wĕhĭ, yû'^{n}wĕhĭ.

Nû^{n}dâgû'^{n}yĭ gatla'ahĭ—Yû'^{n}wĕhĭ.

Gĕ'yagu'ga Gi'gage, tsûwatsi'la gi'gage tsiye'la skĭna'dû'lani'ga—
Yû'ⁿwĕhĭ, yû'ⁿwĕhĭ, yû'ⁿwĕhĭ.
Hiă-'nû' atawe'ladi'yĭ kanâ'hĕhû galû'ⁿlti'tla.

Translation.

SONG FOR PAINTING.

Yû'ⁿwĕhĭ, yû'ⁿwĕhĭ, yû'ⁿwĕhĭ, yû'ⁿwĕhĭ.
I am come from above—*Yû'ⁿwĕhĭ, yû'ⁿwĕhĭ, yû'ⁿwĕhĭ, yû'ⁿwĕhĭ.*
I am come down from the Sun Land—*Yû'ⁿwĕhĭ.*
O Red Agĕ'yagu'ga. you have come and put your red spittle upon my body—
Yû'ⁿwĕhĭ, yû'ⁿwĕhĭ, yû'ⁿwĕhĭ.
And this above is to recite while one is painting himself.

Explanation.

This formula, from Gatigwanasti, immediately follows the one last given, in the manuscript book, and evidently comes immediately after it also in practical use. The expressions used have been already explained. The one using the formula first bathes in the running stream, reciting at the same time the previous formula "Amâ'yĭ Ă'tawasti'yĭ." He then repairs to some convenient spot with his paint, beads, and other paraphernalia and proceeds to adorn himself for the dance, which usually begins about an hour after dark, but is not fairly under way until nearly midnight. The refrain, yû'ⁿwĕhĭ, is probably *sung* while mixing the paint, and the other portion is recited while applying the pigment, or vice versa. Although these formula are still in use, the painting is now obsolete, beyond an occasional daubing of the face, without any plan or pattern, on the occasion of a dance or ball play.

ADALANI'STA'TI'YĬ. I.

Sgĕ! Ha-nâ'gwa hatû'ⁿgani'ga nihĭ'—
—Tsa'watsi'lû tsĭkĭ' tsĭkû' ayû'.
--Hiyelû' tsĭkĭ' tsĭkû' ayû'.
—Tsăwiyû' tsĭkĭ' tsĭkû' ayû'.
—Tsûnahu' tsĭkĭ' tsĭkû' ayû'.

Sgĕ! Nâ'gwa hatû'ⁿgani'ga, Hĭkayû'ⁿlige. Hiă' asga'ya uda'ntâ tsa'ta'hisi'ga [Hĭkayû'ⁿlige] hiye'lastû'ⁿ. Tsaskûlâ'hĭsti-gwû' nige'-sû'ⁿna. Dĭkana'watû'ⁿta-gwû tsûtû'neli'ga. Hĭlû dudantĕ''tĭ nige'-sû'ⁿna. Duda'ntâ dûskalû'ⁿ'tseli'ga. Astĭ' digû'ⁿnage tagu'talû'ⁿtani'ga.

Translation.

TO ATTRACT AND FIX THE AFFECTIONS.

Listen! O, now you have drawn near to hearken—
—Your spittle, I take it, I eat it.
—Your body, I take it, I eat it,
—Your flesh, I take it, I eat it.
—Your heart, I take it, I eat it.
} Each sung four times.

Listen! O, now you have drawn near to hearken, O, Ancient One. This man's (woman's) soul has come to rest at the edge of your body. You are never to let go your hold upon it. It is ordained that you shall do just as you are requested to do. Let her never think upon any other place. Her soul has faded within her. She is bound by the black threads.

Explanation.

This formula is said by the young husband, who has just married an especially engaging wife, who is liable to be attracted by other men. The same formula may also be used by the woman to fix her husband's affections. On the first night that they are together the husband watches until his wife is asleep, when, sitting up by her side, he recites the first words: Sgĕ! Ha-nâ'gwa hatû'ⁿgani'ga nihĭ', and then sings the next four words: Tsawatsi'lû tsĭkĭ' tsĭkû' ayû', "Your spittle, I take it, I eat it," repeating the words four times. While singing he moistens his fingers with spittle, which he rubs upon the breast of the woman. The next night he repeats the operation, this time singing the words, "I take your body." The third night, in the same way, he sings, "I take your flesh," and the fourth and last night, he sings "I take your heart," after which he repeats the prayer addressed to the Ancient One, by which is probably meant the Fire (the Ancient White). A'yû'ⁿinĭ states that the final sentences should be masculine, i. e., His soul has faded, etc., and refer to any would-be seducer. There is no gender distinction in the third person in Cherokee. He claimed that this ceremony was so effective that no husband need have any fears for his wife after performing it.

ADAYE'LIGA'GTA'TĬ'.

Yû! Galû'ⁿlatĭ tsûl'dâ'histĭ, Giya'giya' Sa'ka'ni, nâ'gwa nûⁿtalûⁿ i'yû'ⁿta. Tsâ'la Sa'ka'ni tsûgistâ''tĭ adûⁿni'ga. Nâ'gwa nidâtsu'l'-tanû'ⁿta, nû'ⁿtătagû' hisa'hasi'ga. Tani'dâgûⁿ' aye''lĭ dehidâ'siga. Unada'ndâ dehiyâ'staneli'ga. Nidugale'ntanû'ⁿta nidûhûⁿneli'ga.

Tsisga'ya agine'ga, nûⁿdâgû'ⁿyĭ ditsidâ''stĭ. Gû'nĭ âstû' uhisa''tĭ nige'sûⁿna. Agĕ''ya une'ga hi'ă iyu'stĭ gûlstû''lĭ, iyu'stĭ tsûdâ'ita. Uda'ndâ usĭnu'lĭ dâdatinilû'gûⁿelĭ'. Nûⁿdâgû'ⁿyitsû' dâdatinilugû-stanelĭ. Tsisga'ya agine'ga, ditsidâstû'ⁿĭ nû'nû' kana'tlani'ga. Tsûnkta' tegă'la'watege'stĭ. Tsiye'lûⁿ gesû'ⁿĭ uhisa''tĭ nige'sûⁿna.

Translation.

FOR SEPARATION (OF LOVERS).

Yû! On high you repose, O Blue Hawk, there at the far distant lake. The blue tobacco has come to be your recompense. Now you have arisen at once and come down. You have alighted midway between them where they two are standing. You have spoiled their souls immediately. They have at once become separated.

I am a white man; I stand at the sunrise. The good sperm shall never allow any feeling of loneliness. This white woman is of the Paint (iyustĭ) clan; she is

called (iyustĭ) Wâyĭ'. We shall instantly turn her soul over. We shall turn it over as we go toward the Sun Land. I am a white man. Here where I stand it (her soul) has attached itself to (literally, "come against") mine. Let her eyes in their sockets be forever watching (for me). There is no loneliness where my body is.

Explanation.

This formula, from A'yûⁿinĭ's book, is used to separate two lovers or even a husband and wife, if the jealous rival so desires. In the latter case the preceding formula, from the same source, would be used to forestall this spell. No explanation of the ceremony is given, but the reference to tobacco may indicate that tobacco is smoked or thrown into the fire during the recitation. The particular hawk invoked (giya'giya') is a large species found in the coast region but seldom met with in the mountains. Blue indicates that it brings trouble with it, while white in the second paragraph indicates that the man is happy and attractive in manner.

In the first part of the formula the speaker calls upon the Blue Hawk to separate the lovers and spoil their souls, *i. e.*, change their feeling toward each other. In the second paragraph he endeavors to attract the attention of the woman by eulogizing himself. The expression, "we shall turn her soul over," seems here to refer to turning her affections, but as generally used, to turn one's soul is equivalent to killing him.

(ADALANĬ'STĂ'TI'YĬ II.)

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga, * * hĭlû(stû''lĭ), (* *) ditsa-(dâ'ita). A'yû 0 0 tsila(stû''lĭ). Hiye'la tsĭkĭ' tsĭkû'. (Yû!)

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga. * * hĭlû(stû''lĭ), * * ditsa-(dâ'ita). A'yû 0 0 tsûwi'ya tsĭkĭ' tsĭkû'. Yû!

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga. * * hĭlû(stû''lĭ) * * ditsa-(dâ'ita). A'yu 0 0 tsûwatsi'la tsĭkĭ' tsĭkû' a'yû. Yû!

Yû! Ha-nâ'gwa ada'ntĭ datsâsi'ga. * * hĭlû(stû''lĭ), * * ditsadâ'-(ita). A'yû 0 0 tsûnahŭ' tsĭkĭ' tsĭkû'. Yû!

Sgĕ! "Ha-nâ'gwa ada'ntĭ dutsase', tsugale'ntĭ nige'sûⁿna," tsûdûneĭ, Hĭkayû'ⁿlige galû'ⁿlatĭ. Kananĕ'skĭ Û'ⁿnage galû'ⁿlatĭ (h)etsatsâ'ûⁿtănile'ĭ. Tsănilta'gĭ tsûksâ'ûⁿtanile'ĭ. * * gûla(stû''lĭ), * * ditsadâ'(ita). Dudantâ'gĭ uhani'latâ tĭkwenû'ⁿtani'ga. Kûlkwâ'gĭ igûlsta'lagĭ iyû'ⁿta yû'ⁿwĭ adayû'ⁿlatawă' dudûne'lida'lûⁿ uhisa''tĭ nige'sûⁿna.

Sgĕ! Ha-nâ'gwatĭ uhisa''tĭ dutlû'ⁿtani'ga. Tsû'nkta daskâ'lûⁿtsi'ga. Sâ'gwahĭ di'kta de'gayelûⁿtsi'ga. Ga'tsa igûnû'nugâ'ĭstû uda'ntâ? Usû'hita nudanû'ⁿna ûltûⁿge'ta gûⁿwadûneli'dege'stĭ. Igûⁿwûlsta''ti-gwû duwâlu'wa'tûⁿtĭ nige'sûⁿna. Kananĕ'skĭ Ûⁿnage'ĭ tsanildew'se'stĭ ada'ntâ uktûⁿlesi'dastĭ nige'sûna. Gadâyu'stĭ tsûdâ'ita ada'ntĭ tside'atsasi'ga. A'ya a'kwatseli'ga.

Sgĕ! Ha-nâ'gwûlĕ' hû^{n}hatû^{n}ga'ga, Hĭkayû'^{n}lĭ Gi'gage. Tsetsûli'sĭ hiye'lastû^{n} a'ta'hisi'ga. Ada'ntâ hasû'gû''lawĭ'stani'ga, tsa'skaláhĭstĭ nige'sû^{n}na. Hĭkayû'^{n}lige denătsegû'la'wĭstani'ga. Agĕ''ya gĭ'nsû^{n}-gû'lawĭs'tani'ga uda'ntâ *uwahisi'sata.* Dĭgĭnaskûlâ'hĭstĭ nige'sû^{n}na. Yû!

Hi'ă nasgwû' u'tlâ'yi-gwû dĭgalû'^{n}wistan'tĭ snû^{n}â'yĭ hani''lihû^{n} gûn-asgi'stĭ. Gane'tsĭ aye''lĭ asi'tadis'tĭ watsi'la, ganû^{n}li'yetĭ aguwaye'nĭ andisgâ'ĭ. Sâi'yĭ tsika'nâhe itsu'laha'gwû.

Translation.

TO FIX THE AFFECTIONS.

Yû! Ha! Now the souls have come together. You are of the Deer (x x) clan. Your name is (x x) Ayâsta, I am of the Wolf (o-o) clan.. Your body, I take it, I eat it. Yû! Ha! Now the souls have come together. You are of the Deer clan. Your name is Ayâsta. I am of the Wolf clan. Your flesh I take, I eat. Yû!

Yû! Ha! Now the souls have come together. You are of the Deer clan. Your name is Ayâsta. I am of the Wolf clan. Your spittle I take, I eat. I! Yû!

Yû! Ha! Now the souls have come together. You are of the Deer clan. Your name is Ayâsta. I am of the Wolf clan. Your heart I take, I eat. Yû!

Listen! "Ha! Now the souls have met, never to part," you have said, O Ancient One above. O Black Spider, you have been brought down from on high. You have let down your web. She is of the Deer clan; her name is Ayâsta. Her soul you have wrapped up in (your) web. There where the people of the seven clans are continually coming in sight and again disappearing (i. e. moving about, coming and going), there was never any feeling of loneliness.

Listen! Ha! But now you have covered her over with loneliness. Her eyes have faded. Her eyes have come to fasten themselves on one alone. Whither can her soul escape? Let her be sorrrowing as she goes along, and not for one night alone. Let her become an aimless wanderer, whose trail may never be followed. O Black Spider, may you hold her soul in your web so that it shall never get through the meshes. What is the name of the soul? They two have come together. It is mine!

Listen! Ha! And now you have hearkened, O Ancient Red. Your grandchildren have come to the edge of your body. You hold them yet more firmly in your grasp, never to let go your hold. O Ancient One, we have become as one. The woman has put her (x x x) soul into our hands. We shall never let it go! Yû!

(Directions.)—And this also is for just the same purpose (the preceding formula in the manuscript book is also a love charm). It must be done by stealth at night when they are asleep. One must put the hand on the middle of the breast and rub on spittle with the hand, they say. The other formula is equally good.

Explanation.

This formula to fix the affections of a young wife is taken from the manuscript sheets of the late Gatigwanasti. It very much resembles the other formula for the same purpose, obtained from A'yû'^{n}inĭ, and the brief directions show that the ceremony is alike in both. The first four paragraphs are probably sung, as in the other formula, on four successive nights, and, as explained in the directions and as stated verbally by A'yû'^{n}inĭ, this must be done stealthily at night while the woman is asleep, the husband rubbing his spittle

on her breast with his hand while chanting the song in a low tone, hardly above a whisper. The prayer to the Ancient One, or Ancient Red (Fire), in both formulas, and the expression, "I come to the edge of your body," indicate that the hands are first warmed over the fire, in accordance with the general practice when laying on the hands. The prayer to the Black Spider is a beautiful specimen of poetic imagery, and hardly requires an explanation. The final paragraph indicates the successful accomplishment of his purpose. "Your grandchildren" (tsetsûli'sĭ) is an expression frequently used in addressing the more important deities.

MISCELLANEOUS FORMULAS.

SÛ·NÂ'YĬ EDÂ'HĬ E'SGA ASTÛ·TI'YĬ.

Sgĕ! Uhyû^{n}tsâ'yĭ galû^{n}lti'tla tsûltâ'histĭ, Hĭsgaya Ǥigage'ĭ, usĭnu'lĭ di'tsakûnĭ' denatlû^{n}hi'sani'ga Uy-igawa'stĭ duda'ntĭ. Nû^{n}nâ'hĭ tatuna'watĭ. Usĭnu'lĭ duda'ntâ dani'yû^{n}stanilĭ'.

Sgĕ! Uhyû^{n}tlâ'yĭ galû^{n}lti'tla tsûltâ'histĭ, Hĭsga'ya Tĕ'halu, *hinaw'-sŭ''ki.* Ha-usĭnu'lĭ nâ'gwa di'tsakûnĭ' denatlû^{n}hisani'ga uy-igawa'stĭ duda'ntĭ. Nû^{n}nâ'hĭ tătuna'wătĭ. Usĭnu'lĭ duda'ntâ dani'galĭstanĭ'.

Translation.

TO SHORTEN A NIGHT-GOER ON THIS SIDE.

Listen! In the Frigid Land above you repose, O Red Man, quickly we two have prepared your arrows for the soul of the Imprecator. He has them lying along the path. Quickly we two will take his soul as we go along.

Listen! In the Frigid Land above you repose, O Purple Man, * * * *. Ha! Quickly now we two have prepared your arrows for the soul of the Imprecator. He has them lying along the path. Quickly we two will cut his soul in two.

Explanation.

This formula, from A'yû'^{n}inĭs' book, is for the purpose of driving away a witch from the house of a sick person, and opens up a most interesting chapter of Cherokee beliefs. The witch is supposed to go about chiefly under cover of darkness, and hence is called sû^{n}nâ'yĭ edâ'hĭ, "the night goer." This is the term in common use; but there are a number of formulistic expressions to designate a witch, one of which, u'ya igawa'stĭ, occurs in the body of the formula and may be rendered "the imprecator," i. e., the sayer of evil things or curses. As the counteracting of a deadly spell always results in the death of its author, the formula is stated to be not merely to drive away the wizard, but to kill him, or, according to the formulistic expression, "to shorten him (his life) on this side."

When it becomes known that a man is dangerously sick the witches from far and near gather invisibly about his house after nightfall to worry him and even force their way in to his bedside unless pre-

vented by the presence of a more powerful shaman within the house. They annoy the sick man and thus hasten his death by stamping upon the roof and beating upon the sides of the house; and if they can manage to get inside they raise up the dying sufferer from the bed and let him fall again or even drag him out upon the floor. The object of the witch in doing this is to prolong his term of years by adding to his own life as much as he can take from that of the sick man. Thus it is that a witch who is successful in these practices lives to be very old. Without going into extended details, it may be sufficient to state that the one most dreaded, alike by the friends of the sick man and by the lesser witches, is the Kâ'lana-ayeli'skĭ or Raven Mocker, so called because he flies through the air at night in a shape of fire, uttering sounds like the harsh croak of a raven.

The formula here given is short and simple as compared with some others. There is evidently a mistake in regard to the Red Man, who is here placed in the north, instead of in the east, as it should be. The reference to the arrows will be explained further on. Purple, mentioned in the second paragraph, has nearly the same symbolic meaning as blue, viz: Trouble, vexation and defeat; hence the Purple Man is called upon to frustrate the designs of the witch.

To drive away the witch the shaman first prepares four sharpened sticks, which he drives down into the ground outside the house at each of the four corners, leaving the pointed ends projecting upward and outward. Then, about noontime he gets ready the Tsâlagayû'ⁿlĭ or "Old Tobacco" (*Nicotiana rustica*), with which he fills his pipe, repeating this formula during the operation, after which he wraps the pipe thus filled in a black cloth. This sacred tobacco is smoked only for this purpose. He then goes out into the forest, and returns just before dark, about which time the witch may be expected to put in an appearance. Lighting his pipe, he goes slowly around the house, puffing the smoke in the direction of every trail by which the witch might be able to approach, and probably repeating the same or another formula the while. He then goes into the house and awaits results. When the witch approaches under cover of the darkness, whether in his own proper shape or in the form of some animal, the sharpened stick on that side of the house shoots up into the air and comes down like an arrow upon his head, inflicting such a wound as proves fatal within seven days. This explains the words of the formula, "We have prepared your arrows for the soul of the Imprecator. He has them lying along the path". A'yû'ⁿinĭ said nothing about the use of the sharpened sticks in this connection, mentioning only the tobacco, but the ceremony, as here described, is the one ordinarily used. When wounded the witch utters a groan which is heard by those listening inside the house, even at the distance of half a mile. No one knows certainly

who the witch is until a day or two afterward, when some old man or woman, perhaps in a remote settlement, is suddenly seized with a mysterious illness and before seven days elapse is dead.

GAHU'STĬ A'GIYAHU'SA.

Sgĕ! Ha-nâ'gwa hatû'ⁿgani'ga Nû'ⁿya Wâtige'ĭ, gahu'stĭ tsûtska'dĭ nige'sûⁿna. Ha-nâ'gwa dû'ⁿgihya'lĭ. Agiyahu'sa sĭ'kwa, haga' tsûⁿ-nû' iyû'ⁿta dătsi'waktû'hĭ. Tla-'ke' a'ya a'kwatseli'ga. 0 0 digwadâi'ta.

Translation.

I HAVE LOST SOMETHING.

Listen! Ha! Now you have drawn near to hearken, O Brown Rock; you never lie about anything. Ha! Now I am about to seek for it. I have lost a hog and now tell me about where I shall find it. For is it not mine? My name is ———.

Explanation.

This formula, for finding anything lost, is so simple as to need but little explanation. Brown in this instance has probably no mythologic significance, but refers to the color of the stone used in the ceremony. This is a small rounded water-worn pebble, in substance resembling quartz and of a reddish-brown color. It is suspended by a string held between the thumb and finger of the shaman, who is guided in his search by the swinging of the pebble, which, according to their theory, will swing farther in the direction of the lost article than in the contrary direction! The shaman, who is always fasting, repeats the formula, while closely watching the the motions of the swinging pebble. He usually begins early in the morning, making the first trial at the house of the owner of the lost article. After noting the general direction toward which it seems to lean he goes a considerable distance in that direction, perhaps half a mile or more, and makes a second trial. This time the pebble may swing off at an angle in another direction. He follows up in the direction indicated for perhaps another half mile, when on a third trial the stone may veer around toward the starting point, and a fourth attempt may complete the circuit. Having thus arrived at the conclusion that the missing article is somewhere within a certain circumscribed area, he advances to the center of this space and marks out upon the ground a small circle inclosing a cross with arms pointing toward the four cardinal points. Holding the stone over the center of the cross he again repeats the formula and notes the direction in which the pebble swings. This is the final trial and he now goes slowly and carefully over the whole surface in that direction, between the center of the circle and the limit of the circumscribed area until in theory, at least, the article is found. Should he fail, he is never at a loss for excuses, but the specialists in this line are

generally very shrewd guessers well versed in the doctrine of probabilities.

There are many formulas for this purpose, some of them being long and elaborate. When there is reason to believe that the missing article has been stolen, the specialist first determins the clan or settlement to which the thief belongs and afterward the name of the individual. Straws, bread balls, and stones of various kinds are used in the different formulas, the ceremony differing according to the medium employed. The stones are generally pointed crystals or antique arrowheads, and are suspended as already described, the point being supposed to turn finally in the direction of the missing object. Several of these stones have been obtained on the reservation and are now deposited in the National Museum. It need excite no surprise to find the hog mentioned in the formula, as this animal has been domesticated among the Cherokees for more than a century, although most of them are strongly prejudiced against it.

HIA' UNÁLE (ATESTI'YĬ).

Yuhahi', yuhahi', yuhahi', yuhahı, yuhahi',
Yuhahi', yuhahi', yuhahi', yuhahi', yuhahi'—Yû!

Sgĕ! Ha-nâ'gwa hĭnahû^{n}'ski tayĭ'. Ha-tâ'sti-gwû gŭ^{n}ska'ihû. Tsûtali'i-gwati'na halu'ʻnĭ. Kû'nigwati'na dula'ska galû$^{'n}$lati-gwû witu'ktĭ. Wigû^{n}yasĕ'hĭsĭ. Â'talĭ tsugû$^{'n}$yĭ wite'tsatanû$^{'n}$û^{n}sĭ' nû^{n}nâhĭ tsane'lagĭ de'gatsana'wadise'stĭ. Kûnstû' dutsasû$^{'n}$ĭ atû$^{'n}$wasûtĕ'hahĭ' tsûtûneli'sestĭ. Sgĕ!

Translation.

THIS IS TO FRIGHTEN A STORM.

Yuhahi', yuhahi', yuhahi', yuhahi', yuhahi',
Yuhahi', yuhahi', yuhahi', yuhahi', yuhahi'—Yû!

Listen! O now you are coming in rut. Ha! I am exceedingly afraid of you. But yet you are only tracking your wife. Her footprints can be seen there directed upward toward the heavens. I have pointed them out for you. Let your paths stretch out along the tree tops (?) on the lofty mountains (and) you shall have them (the paths) lying down without being disturbed, Let (your path) as you go along be where the waving branches meet. Listen!

Explanation.

This formula, from A'yû'^{n}inĭ's book, is for driving away, or "frightening" a storm, which threatens to injure the growing corn. The first part is a meaningless song, which is sung in a low tone in the peculiar style of most of the sacred songs. The storm, which is not directly named, is then addressed and declared to be coming on in a fearful manner on the track of his wife, like an animal in the rutting season. The shaman points out her tracks directed toward

the upper regions and begs the storm spirit to follow her along the waving tree tops of the lofty mountains, where he shall be undisturbed.

The shaman stands facing the approaching storm with one hand stretched out toward it. After repeating the song and prayer he gently blows in the direction toward which he wishes it to go, waving his hand in the same direction as though pushing away the storm. A part of the storm is usually sent into the upper regions of the atmosphere. If standing at the edge of the field, he holds a blade of corn in one hand while repeating the ceremony.

DANAWŪ' TSUNEDÂLŪ'HĬ NUNATŪ'NELI'TALŪ'ⁿHĬ U'NALSTELTA''TANŪ'HĬ.

Hayĭ'! Yû! Sgĕ! Nâ'gwa usĭnuli'yu A'tasu Gĭ'gage'ĭ hinisa'latani'ga. Usĭnu'lĭ duda'ntâ u'nanugâ'tsidastĭ' nige'sû^{n}na. Duda'ntâ e'lawi'nĭ iyû'^{n}ta ă'tasû digû^{n}nage'ĭ degû^{n}lskwĭ'tahise'stĭ, anetsâge'ta unanugâ'istĭ nige'sû^{n}na, nitinû'^{n}neli'ga. Ă'tasû dusa'ladanû'^{n}stĭ nige'sû^{n}na, nitinû'^{n}neli'ga. E'lawi'nĭ iyû'^{n}ta ă'tasû û^{n}nage' ugû^{n}'hatû û^{n}nage' sâ'gwa da'liyĕ'kû'lani'ga *unadutlă'gĭ*. Unanugâ'tsida'stĭ nige'sû^{n}na, nû^{n}neli'ga.

Usĭnuli'yu tsunada'ntâ kûl'kwâ'gine tigalû'^{n}ltiyû'^{n}ĭ iyû'^{n}ta ada'ntâ tega'yĕ'ti'tege'stĭ. Tsunada'ntâ tsuligalĭ'stĭ nige'sû^{n}na dudûni'tege'stĭ. Usĭnu'lĭ deniû'^{n}eli'ga galû'^{n}latĭ iyû'^{n}ta widu'l'tâhĭsti'tege'stĭ. Ă'tasû gigage'ĭ dĕhatagû'^{n}yastani'ga. Tsunada'ntâ tsudastû'nilida'stĭ nige'sû^{n}na nû^{n}neli'ga. Tsunada'ntâ galû'^{n}latĭ iyû'^{n}ta witĕ''titege'stĭ. Tsunada'ntâ anigwalu'gĭ úne'ga gû^{n}wa'nadagû'^{n}yastitege'stĭ. Sa'ka'nĭ udûnû'hĭ nige'sû^{n}na usĭnuli'yu. Yû!

Translation.

WHAT THOSE WHO HAVE BEEN TO WAR DID TO HELP THEMSELVES.

Hayĭ'! Yû! Listen! Now instantly we have lifted up the red war club. Quickly his soul shall be without motion. There under the earth, where the black war clubs shall be moving about like ball sticks in the game, there his soul shall be, never to reappear. We cause it to be so. He shall never go and lift up the war club. We cause it to be so. There under the earth the black war club (and) the black fog have come together as one for their covering. It shall never move about (*i. e.*, the black fog shall never be lifted from them). We cause it to be so.

Instantly shall their souls be moving about there in the seventh heaven. Their souls shall never break in two. So shall it be. Quickly we have moved them (their souls) on high for them, where they shall be going about in peace. You (?) have shielded yourselves (?) with the red war club. Their souls shall never be knocked about. Cause it to be so. There on high their souls shall be going about. Let them shield themselves with the white war whoop. Instantly (grant that) they shall never become blue. Yû!

Explanation.

This formula, obtained from A'wani'ta, may be repeated by the doctor for as many as eight men at once when about to go to war. It is recited for four consecutive nights, immediately before setting

out. There is no tabu enjoined and no beads are used, but the warriors "go to water" in the regular way, that is, they stand at the edge of the stream, facing the east and looking down upon the water, while the shaman, standing behind them, repeats the formula. On the fourth night the shaman gives to each man a small charmed root which has the power to confer invulnerability. On the eve of battle the warrior after bathing in the running stream chews a portion of this and spits the juice upon his body in order that the bullets of the enemy may pass him by or slide off from his skin like drops of water. Almost every man of the three hundred East Cherokees who served in the rebellion had this or a similar ceremony performed before setting out—many of them also consulting the oracular ulû^{n}-sû'tĭ stone at the same time—and it is but fair to state that not more than two or three of the entire number were wounded in actual battle.

In the formula the shaman identifies himself with the warriors, asserting that "*we*" have lifted up the red war club, red being the color symbolic of success and having no reference to blood, as might be supposed from the connection. In the first paragraph he invokes curses upon the enemy, the future tense verb *It shall be*, etc., having throughout the force of *let it be*. He puts the souls of the doomed enemy in the lower regions, where the black war clubs are constantly waving about, and envelops them in a black fog, which shall never be lifted and out of which they shall never reappear. From the expression in the second paragraph, "their souls shall never be knocked about," the reference to the black war clubs moving about like ball sticks in the game would seem to imply that they are continually buffeting the doomed souls under the earth. The spirit land of the Cherokees is in the west, but in these formulas of malediction or blessing the soul of the doomed man is generally consigned to the underground region, while that of the victor is raised by antithesis to the seventh heaven.

Having disposed of the enemy, the shaman in the second paragraph turns his attention to his friends and at once raises their souls to the seventh heaven, where they shall go about in peace, shielded by (literally, "covered with") the red war club of success, and never to be knocked about by the blows of the enemy. "Breaking the soul in two" is equivalent to snapping the thread of life, the soul being regarded as an intangible something having length, like a rod or a string. This formula, like others written down by the same shaman, contains several evident inconsistencies both as to grammar and mythology, due to the fact that A'wanita is extremely careless with regard to details and that this particular formula has probably not been used for the last quarter of a century. The warriors are also made to shield themselves with the white war whoop, which should undoubtedly be the red war whoop, consistent with the red

war club, white being the color emblematic of peace, which is evidently an incongruity. The war whoop is believed to have a positive magic power for the protection of the warrior, as well as for terrifying the foe.

The mythologic significance of the different colors is well shown in this formula. Red, symbolic of success, is the color of the war club with which the warrior is to strike the enemy and also of the other one with which he is to shield or "cover" himself. There is no doubt that the war whoop also should be represented as red. In conjuring with the beads for long life, for recovery from sickness, or for success in love, the ball play, or any other undertaking, the red beads represent the party for whose benefit the magic spell is wrought, and he is figuratively clothed in red and made to stand upon a red cloth or placed upon a red seat. The red spirits invoked always live in the east and everything pertaining to them is of the same color.

Black is always typical of death, and in this formula the soul of the enemy is continually beaten about by black war clubs and enveloped in a black fog. In conjuring to destroy an enemy the shaman uses black beads and invokes the black spirits—which always live in the west—bidding them tear out the man's soul, carry it to the west, and put it into the black coffin deep in the black mud, with a black serpent coiled above it.

Blue is emblematic of failure, disappointment, or unsatisfied desire. "They shall never become blue" means that they shall never fail in anything they undertake. In love charms the lover figuratively covers himself with red and prays that his rival shall become entirely blue and walk in a blue path. The formulistic expression, "He is entirely blue," closely approximates in meaning the common English phrase, "He feels blue." The blue spirits live in the north.

White—which occurs in this formula only by an evident error—denotes peace and happiness. In ceremonial addresses, as at the green corn dance and ball play, the people figuratively partake of white food and after the dance or the game return along the white trail to their white houses. In love charms the man, in order to induce the woman to cast her lot with his, boasts "I am a white man," implying that all is happiness where he is. White beads have the same meaning in the bead conjuring and white was the color of the stone pipe anciently used in ratifying peace treaties. The white spirits live in the south (Wa'hală).

Two other colors, brown and yellow, are also mentioned in the formulas. Wâtige'ĭ, "brown," is the term used to include brown, bay, dun, and similar colors, especially as applied to animals. It seldom occurs in the formulas and its mythologic significance is as yet undetermined. Yellow is of more frequent occurrence and is typical of trouble and all manner of vexation, the yellow spirits

being generally invoked when the shaman wishes to bring down calamities upon the head of his victim, without actually destroying him. So far as present knowledge goes, neither brown nor yellow can be assigned to any particular point of the compass.

Usĭnuli'yu, rendered "instantly," is the intensive form of usĭnu'lĭ "quickly," both of which words recur constantly in the formulas, in some entering into almost every sentence. This frequently gives the translation an awkward appearance. Thus the final sentence above, which means literally "they shall never become blue instantly," signifies "Grant that they shall never become blue, i. e., shall never fail in their purpose, *and grant our petition instantly.*

DIDA'LATLI'TĬ.

Sgĕ! Nâ'gwa tsûdantâ'gĭ tegû'ⁿyatawâ'ilateli'ga. Iyustĭ (0 0) tsilastû''lĭ Iyu'stĭ (0 0) ditsadâ'ita. Tsûwatsi'la elawi'nĭ tsidâ'hĭstani'ga. Tsûdantâgĭ elawi'nĭ tsidâ'hĭstani'ga. Nû'ⁿya gû'ⁿnage gûⁿyu'tlûⁿtani'ga. A'nûwa'gĭ gû'ⁿnage' gûⁿyû'tlûⁿtani'ga. Sûⁿtalu'ga gû'ⁿnage degû'ⁿyanu'galû'ⁿtani'ga, tsû'nanugâ'istĭ nige'sûⁿna. Usûhi'yĭ nûⁿnâ'hĭ wite'tsatanû'ⁿûⁿsĭ gûne'sâ gû'ⁿnage asahalagĭ'. Tsûtû'neli'ga. Elawâ'tĭ asa'halagĭ'a'dûⁿni'ga. Usĭnuli'yu Usûhi'yĭ gûltsâ'tĕ digû'ⁿnagesta'yĭ, elawâ'tĭ gû'ⁿnage tidâ'hĭstĭ wa'yanu'galûⁿtsi'ga. Gûne'sa gû'ⁿage sûⁿtalu'ga gû'ⁿnage gayu'tlûⁿtani'ga. Tsûdantâ'gĭ ûska'lûⁿtsi'ga. Sa'ka'nĭ adûⁿni'ga. Usû'hita atanis'se'tĭ, ayâ'lâtsi'sestĭ tsûdantâ'gĭ, tsû'nanugâ'istĭ nige'sûⁿna. Sgĕ!

Translation.

TO DESTROY LIFE.

Listen! Now I have come to step over your soul. You are of the (wolf) clan. Your name is (A'yû'ⁿinĭ). Your spittle I have put at rest under the earth. Your soul I have put at rest under the earth. I have come to cover you over with the black rock. I have come to cover you over with the black cloth. I have come to cover you with the black slabs, never to reappear. Toward the black coffin of the upland in the Darkening Land your paths shall stretch out. So shall it be for you. The clay of the upland has come (to cover you. (?) Instantly the black clay has lodged there where it is at rest at the black houses in the Darkening Land. With the black coffin and with the black slabs I have come to cover you. Now your soul has faded away. It has become blue. When darkness comes your spirit shall grow less and dwindle away, never to reappear. Listen!

Explanation.

This formula is from the manuscript book of A'yû'ⁿinĭ, who explained the whole ceremony. The language needs but little explanation. A blank is left for the name and clan of the victim, and is filled in by the shaman. As the purpose of the ceremony is to bring about the death of the victim, everything spoken of is symbolically colored black, according to the significance of the colors as already

explained. The declaration near the end, "It has become blue," indicates that the victim now begins to feel in himself the effects of the incantation, and that as darkness comes on his spirit will shrink and gradually become less until it dwindles away to nothingness.

When the shaman wishes to destroy the life of another, either for his own purposes or for hire, he conceals himself near the trail along which the victim is likely to pass. When the doomed man appears the shaman waits until he has gone by and then follows him secretly until he chances to spit upon the ground. On coming up to the spot the shaman collects upon the end of a stick a little of the dust thus moistened with the victim's spittle. The possession of the man's spittle gives him power over the life of the man himself. Many ailments are said by the doctors to be due to the fact that some enemy has by this means "changed the spittle" of the patient and caused it to breed animals or sprout corn in the sick man's body. In the love charms also the lover always figuratively "takes the spittle" of the girl in order to fix her affections upon himself. The same idea in regard to spittle is found in European folk medicine.

The shaman then puts the clay thus moistened into a tube consisting of a joint of the Kanesâ'la or wild parsnip, a poisonous plant of considerable importance in life-conjuring ceremonies. He also puts into the tube seven earthworms beaten into a paste, and several splinters from a tree which has been struck by lightning. The idea in regard to the worms is not quite clear, but it may be that they are expected to devour the soul of the victim as earthworms are supposed to feed upon dead bodies, or perhaps it is thought that from their burrowing habits they may serve to hollow out a grave for the soul under the earth, the quarter to which the shaman consigns it. In other similar ceremonies the dirt-dauber wasp or the stinging ant is buried in the same manner in order that it may kill the soul, as these are said to kill other more powerful insects by their poisonous sting or bite. The wood of a tree struck by lightning is also a potent spell for both good and evil and is used in many formulas of various kinds.

Having prepared the tube, the shaman goes into the forest to a tree which has been struck by lightning. At its base he digs a hole, in the bottom of which he puts a large yellow stone slab. He then puts in the tube, together with seven yellow pebbles, fills in the earth and finally builds a fire over the spot to destroy all traces of his work. The yellow stones are probably chosen as the next best substitute for black stones, which are not always easy to find. The formula mentions "black rock," black being the emblem of death, while yellow typifies trouble. The shaman and his employer fast until after the ceremony.

If the ceremony has been properly carried out, the victim becomes blue, that is, he feels the effects in himself at once, and, unless

he employs the countercharms of some more powerful shaman, his soul begins to shrivel up and dwindle, and within seven days he is dead. When it is found that the spell has no effect upon the intended victim it is believed that he has discovered the plot and has taken measures for his own protection, or that, having suspected a design against him—as, for instance, after having won a girl's affections from a rival or overcoming him in the ball play—he has already secured himself from all attempts by counterspells. It then becomes a serious matter, as, should he succeed in turning the curse aside from himself, it will return upon the heads of his enemies.

The shaman and his employer then retire to a lonely spot in the mountains, in the vicinity of a small stream, and begin a new series of conjurations with the beads. After constructing a temporary shelter of bark laid over poles, the two go down to the water, the shaman taking with him two pieces of cloth, a yard or two yards in length, one white, the other black, together with seven red and seven black beads. The cloth is the shaman's pay for his services, and is furnished by his employer, who sometimes also supplies the beads. There are many formulas for conjuring with the beads, which are used on almost all important occasions, and differences also in the details of the ceremony, but the general practice is the same in all cases. The shaman selects a bend in the river where his client can look toward the east while facing up stream. The man then takes up his position on the bank or wades into the stream a short distance, where—in the ceremonial language—the water is a "hand length" (*awā'hilū*) in depth and stands silently with his eyes fixed upon the water and his back to the shaman on the bank. The shaman then lays upon the ground the two pieces of cloth, folded into convenient size, and places the red beads—typical of success and his client—upon the white cloth, while the black beads—emblematic of death and the intended victim—are laid upon the black cloth. It is probable that the first cloth should properly be red instead of white, but as it is difficult to get red cloth, except in the shape of handkerchiefs, a substitution has been made, the two colors having a close mythologic relation. In former days a piece of buckskin and the small glossy seeds of the Viper's Bugloss (*Echium vulgare*) were used instead of the cloth and beads. The formulistic name for the bead is *sû'nĭkta*, which the priests are unable to analyze, the ordinary word for beads or coin being *adélā*.

The shaman now takes a red bead, representing his client, between the thumb and index finger of his right hand, and a black bead, representing the victim, in like manner, in his left hand. Standing a few feet behind his client he turns toward the east, fixes his eyes upon the bead between the thumb and finger of his right hand, and addresses it as the Sû'nĭkta Gigăge'ĭ, the Red Bead, invoking blessings upon his client and clothing him with the red garments of

success. The formula is repeated in a low chant or intonation, the voice rising at intervals, after the manner of a revival speaker. Then turning to the black bead in his left hand he addresses it in similar manner, calling down the most withering curses upon the head of the victim. Finally looking up he addresses the stream, under the name of Yû'ⁿwĭ Gûnahi'ta, the "Long Person," imploring it to protect his client and raise him to the seventh heaven, where he will be secure from all his enemies. The other, then stooping down, dips up water in his hand seven times and pours it upon his head, rubbing it upon his shoulders and breast at the same time. In some cases he dips completely under seven times, being stripped, of course, even when the water is of almost icy coldness. The shaman, then stooping down, makes a small hole in the ground with his finger, drops into it the fatal black bead, and buries it out of sight with a stamp of his foot. This ends the ceremony, which is called "taking to water."

While addressing the beads the shaman attentively observes them as they are held between the thumb and finger of his outstretched hands. In a short time they begin to move, slowly and but a short distance at first, then faster and farther, often coming down as far as the first joint of the finger or even below, with an irregular serpentine motion from side to side, returning in the same manner. Should the red bead be more lively in its movements and come down lower on the finger than the black bead, he confidently predicts for the client the speedy accomplishment of his desire. On the other hand, should the black bead surpass the red in activity, the spells of the shaman employed by the intended victim are too strong, and the whole ceremony must be gone over again with an additional and larger quantity of cloth. This must be kept up until the movements of the red beads give token of success or until they show by their sluggish motions or their failure to move down along the finger that the opposing shaman can not be overcome. In the latter case the discouraged plotter gives up all hope, considering himself as cursed by every imprecation which he has unsuccessfully invoked upon his enemy, goes home and—theoretically—lies down and dies. As a matter of fact, however, the shaman is always ready with other formulas by means of which he can ward off such fatal results, in consideration of a sufficient quantity of cloth.

Should the first trial, which takes place at daybreak, prove unsuccessful, the shaman and his client fast until just before sunset. They then eat and remain awake until midnight, when the ceremony is repeated, and if still unsuccessful it may be repeated four times before daybreak (or the following noon ?), both men remaining awake and fasting throughout the night. If still unsuccessful, they continue to fast all day until just before sundown. Then they eat again and again remain awake until midnight, when the previous night's

programme is repeated. It has now become a trial of endurance between the revengeful client and his shaman on the one side and the intended victim and his shaman on the other, the latter being supposed to be industriously working countercharms all the while, as each party must subsist upon one meal per day and abstain entirely from sleep until the result has been decided one way or the other. Failure to endure this severe strain, even so much as closing the eyes in sleep for a few moments or partaking of the least nourishment excepting just before sunset, neutralizes all the previous work and places the unfortunate offender at the mercy of his more watchful enemy. If the shaman be still unsuccessful on the fourth day, he acknowledges himself defeated and gives up the contest. Should his spells prove the stronger, his victim will die within seven days, or, as the Cherokees say, seven nights. These "seven nights," however, are frequently interpreted, figuratively, to mean *seven years*, a rendering which often serves to relieve the shaman from a very embarrassing position.

With regard to the oracle of the whole proceeding, the beads do move; but the explanation is simple, although the Indians account for it by saying that the beads become alive by the recitation of the sacred formula. The shaman is laboring under strong, though suppressed, emotion. He stands with his hands stretched out in a constrained position, every muscle tense, his breast heaving and voice trembling from the effort, and the natural result is that before he is done praying his fingers begin to twitch involuntarily and thus cause the beads to move. As before stated, their motion is irregular; but the peculiar delicacy of touch acquired by long practice probably imparts more directness to their movements than would at first seem possible.

HIA' A'NE'TSÂ UGÛ'ⁿWA'LĬ AMÂ'YĬ DITSÛ'ⁿSTA'TĬ.

Sgè! Ha-nâgwa ă'stĭ une'ga aksâ'ûⁿtanû'ⁿ usĭnu'lĭ a'ne'tsâ unatsâ'nûⁿtse'lahĭ akta''tĭ adûⁿni'ga.

Iyu'stĭ utadâ'ta, iyu'stĭ tsunadâ'ita. Nûⁿnâ'hĭ anite'lahĕhû' ige'skĭ nige'sûⁿna. Dû'ksi-gwû' dedu'natsgû'la'wate'gû. Da''sûⁿ unilâtsi'satû. Sa'ka'ni unati'satû'.

Nûⁿnâ'hĭ dâ'tadu'nina'watĭ' a'yû-'nû' digwatseli'ga a'ne'tsâ unatsâ'nûⁿtse'lahĭ. Tla'mehû Gigage'ĭ sâ'gwa danûtsgû''lani'ga. Igŭ'ⁿyĭ galû'ⁿlâ ge'sûⁿ i'yûⁿ kanû'ⁿlagĭ ᵘwâhâ'hĭstâ'gĭ. Ta'line galû'ⁿlâ ge'sûⁿ i'yûⁿ kanû'ⁿlagĭ ᵘwâhâ'hĭstâ'gĭ. He'nilû danûtsgû''lani'ga. Tla'ma ûⁿni'ta a'nigwalu'gĭ gûⁿtla''tisge'stĭ, ase'gwû nige'sûⁿna.

Du'talĕ a'ne'tsâ unatsâ'nûⁿtse'lahĭ saligu'gi-gwû dedu'natsgû''lawĭsti'tegû'. Elawi'nĭ da''sûⁿ unilâtsi'satû.

Tsâ'ine digalû'ⁿlatiyû'ⁿ Să'niwă Gi'gageĭ sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ nige'sûⁿna. Kanû'ⁿlagĭ ᵘwâhâ'hĭstâ'gĭ nû''gine digalû'ⁿlatiyû'ⁿ. Gulĭ'sgulĭ' Sa'ka'ni sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ

nige'sûⁿna. Kanû'ⁿlagĭ ᵘwâhâ'hĭstâgĭ hĭ'skine digalû'ⁿlatiyû'ⁿ. Tsŭtsŭ' Sa'ka'ni sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ nige'sûⁿna.

Du'talĕ a'ne'tsâ utsâ'nûⁿtse'lahĭ Tĭne'gwa Sa'ka'ni sâ'gwa danûtsgû''lani'ga, ige'skĭ nige'sûⁿna. Da''sûⁿ unilâtsi'satû. Kanû'ⁿlagĭ ᵘwâhâ'hĭstâ'gĭ sutali'ne digalû'ⁿlatiyû'ⁿ. A'nigâsta'ya sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ nige'suⁿna. Kanû'ⁿlagĭ ᵘwâhâ'hĭstâ'gĭ kûl'kwâgine digalû'ⁿlatiyû'ⁿ. Wâtatû'ga Sa'ka'ni sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ nige'sûⁿna.

Du'talĕ a'ne'tsâ unatsâ'nûⁿtse'lahĭ, Yâ'na dedu'natsgû''lawĭstani'ga, ige'skĭ nige'sûⁿna. Da'sûⁿ du'nilâtsi'satû. Kanû'ⁿlagĭ de'tagaskalâ'ûⁿtanû'ⁿ, igûⁿ'wûlstanûhi-gwûdi'na tsuye'listi gesû'ⁿĭ. Akta''tĭ adûⁿni'ga.

Sgĕ! Nâ'gwa t'skĭ'nâne'lĭ ta'lădŭ' iyû'ⁿta a'gwatseli'ga, Wătatu'ga Tsûne'ga. Tsuye'listĭ gesû'ⁿĭ skĭ'nâhûⁿsĭ' a'gwatseli'ga—kanû'ⁿlagĭ a'gwatseli'ga. Nă''nâ utadâ'ta kanû'ⁿlagĭ dedu'skalâ'asi'ga.

Dedû'ndagû'ⁿyastani'ga, gûⁿwâ'hisâ'nûhĭ. Yû!

Translation.

THIS CONCERNS THE BALL PLAY—TO TAKE THEM TO WATER WITH IT.

Listen! Ha! Now where the white thread has been let down, quickly we are about to examine into (the fate of) the admirers of the ball play.

They are of—such a (iyu'stĭ) descent. They are called—so and so (iyu'stĭ). They are shaking the road which shall never be joyful. The miserable Terrapin has come and fastened himself upon them as they go about. They have lost all strength. They have become entirely blue.

But now my admirers of the ball play have their roads lying along in this direction. The Red Bat has come and made himself one of them. There in the first heaven are the pleasing stakes. There in the second heaven are the pleasing stakes. The Pewee has come and joined them. The immortal ball stick shall place itself upon the whoop, never to be defeated.

As for the lovers of the ball play on the other side, the common Turtle has come and fastened himself upon them as they go about. Under the earth they have lost all strength.

The pleasing stakes are in the third heaven. The Red Tlăniwă has come and made himself one of them, that they may never be defeated. The pleasing stakes are in the fourth heaven. The Blue Fly-catcher has made himself one of them, that they may never be defeated. The pleasing stakes are in the fifth heaven. The Blue Martin has made himself one of them, that they may never be defeated.

The other lovers of the ball play, the Blue Mole has come and fastened upon them, that they may never be joyous. They have lost all strength.

The pleasing stakes are there in the sixth heaven. The Chimney Swift has made himself one of them, that they may never be defeated. The pleasing stakes are in the seventh heaven. The Blue Dragon-fly has made himself one of them, that they may never be defeated.

As for the other admirers of the ball play, the Bear has just come and fastened him upon them, that they may never be happy. They have lost all strength. He has let the stakes slip from his grasp and there shall be nothing left for their share.

The examination is ended.

Listen! Now let me know that the twelve are mine, O White Dragon-fly. Tell me that the share is to be mine—that the stakes are mine. As for the player there on the other side, he has been forced to let go his hold upon the stakes.

Now they are become exultant and happy. Yû!

Explanation.

This formula, from the A'yûⁿinĭ manuscript is one of those used by the shaman in taking the ball players to water before the game. The ceremony is performed in connection with red and black beads, as described in the formula just given for destroying life. The formulistic name given to the ball players signifies literally, "admirers of the ball play." The Tlă'niwă (să'niwă in the Middle dialect) is the mythic great hawk, as large and powerful as the roc of Arabian tales. The shaman begins by declaring that it is his purpose to examine or inquire into the fate of the ball players, and then gives his attention by turns to his friends and their opponents, fixing his eyes upon the red bead while praying for his clients, and upon the black bead while speaking of their rivals. His friends he raises gradually to the seventh or highest *galû'ⁿlatĭ*. This word literally signifies height, and is the name given to the abode of the gods dwelling above the earth, and is also used to mean heaven in the Cherokee bible translation. The opposing players, on the other hand, are put down under the earth, and are made to resemble animals slow and clumsy of movement, while on behalf of his friends the shaman invokes the aid of swift-flying birds, which, according to the Indian belief, never by any chance fail to secure their prey. The birds invoked are the He'nilû or wood pewee (*Contopus virens*), the Tlăniwă or mythic hawk, the Gulĭ'sgulĭ' or great crested flycatcher (*Myiarchus crinitus*), the Tsŭtsŭ or martin (*Progne subis*), and the A'nigâsta'ya or chimney swift (*Chætura pelasgia*). In the idiom of the formulas it is said that these "have just come and are sticking to them" (the players), the same word (*danûtsgû'lanĭ'ga*) being used to express the devoted attention of a lover to his mistress. The Watatuga, a small species of dragon-fly, is also invoked, together with the bat, which, according to a Cherokee myth, once took sides with the birds in a great ball contest with the four-footed animals, and won the victory for the birds by reason of his superior skill in dodging. This myth explains also why birds, and no quadrupeds, are invoked by the shaman to the aid of his friends. In accordance with the regular color symbolism the flycatcher, martin, and dragonfly, like the bat and the tlă'niwă, should be red, the color of success, instead of blue, evidently so written by mistake. The white thread is frequently mentioned in the formulas, but in this instance the reference is not clear. The twelve refers to the number of runs made in the game.

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